

RADICAL ENERGY NARRATIVES IN ARGENTINA AND BRAZIL

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Dedication

This dissertation is dedicated to Dr. Jed Deppman (1967-2019).

May his hardy energy live on in the students he taught.

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ABSTRACT

RADICAL ENERGY NARRATIVES IN ARGENTINA AND BRAZIL

Nancy Lee Roane

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This dissertation uncovers underlying arguments in Argentine and Brazilian media from 1971-2017 about why (and how) humans consume energy to the detriment of the planet. I identify films and novels that challenge colonial “male energy narratives” (Nye 1993) through re-writing canonical texts about “civilization” in the Southern Cone such as *Martín Fierro* (José Hernández) and the “Manifesto Antropófago [Cannibalist Manifesto]” (Oswald de Andrade). What I term “radical energy narratives” craft ethical and ecological responses to the present climate crisis through prioritizing energy transfers over accumulation, return on investment, or extraction. This flips the perspective from how humans use energy to *how energy uses us*, reframing life as a series of relationships born out of energy moving through and then moving on. “Radical energy narratives” frame non-teleological energy expenditure as joyful, creative, connected, and ephemeral. Authors and film directors include César Aira, Nelson Pereira dos Santos, Lucrecia Martel, Marcelo Gomes, Karim Aïnouz, and Gabriela Cabezón Cámara. This project is in dialogue with Georges Bataille, Eduardo Viveiros de Castro, Donna Haraway, Dominic Boyer, Jane Bennett, Gilbert Simondon, and Gilles Deleuze, among others.

TABLE OF CONTENTS

ACKNOWLEDGMENTS.....	III
ABSTRACT	V
TABLE OF CONTENTS	VI
INTRODUCTION: WHY WE NEED NEW ENERGY NARRATIVES	1
Argentina, Brazil, Civilization.....	5
Energy and Civilization Narratives	10
Outline of the chapters	37
CHAPTER 1: TECHNICS AND SAVAGERY IN THE BEGINNING	40
Defining Humans	46
Cannibal Energetics.....	56
Technicized Barbarians?	61
Conclusion.....	77
CHAPTER 2: MASCULINE ENERGY AT THE EDGE OF CIVILIZATION	81
Energy at the Edge.....	84
Smoothness & Movement	91
Texture.....	96
CHAPTER 3: RADICAL ENERGETICS IN PARADISE	118
Martin and China's Energy Narratives	122
Relationships and Things.....	131
Cosmic Radical Energy.....	138

CODA: RADICAL ENERGETICS AT HOME.....	142
BIBLIOGRAPHY	147

INTRODUCTION: Why We Need New Energy Narratives

A mí escribir me sirvió para
construirme un espacio habitable
en el mundo, para ayudarme a vivir.

Writing gave me the chance
to construct a habitable space
in the world, it helped me live.

- Gabriela Cabezón Cámara¹

Things are looking a lot less habitable these days. As the climate crisis grows, the belief in progress has given way to a resigned sense of doom. The anthropologist Anna Tsing notes how the image of ruination is itself wrapped up in a worldview organized around progress: things are either getting better, instilling a sense of hope and purpose, or they aren't (*The Mushroom* vii). Such a framework equates life with winning and death with failure. As Lauren Oyler puts it in a recent novel excerpted in *The Atlantic*, “the popular turn to fatalism could be attributed to self-aggrandizement and an ignorance of history” because “we don’t want to die, but we also don’t want to do anything challenging, such as what living requires...” (“Discovery”). Tsing rejects these rise-and-fall stories, embedded as they are in narratives of human exceptionality and “civilization.” Instead, she opts for “troubled stories” of precarious collaboration, of vulnerability to the other (34). This vision of what is “habitable” looks quite different from that of comfort, or even success, recasting life outside of a progressive or regressive

¹ Interview with Tomás Villegas for “El Diletante,” April 22, 2020, my trans.

framework. What would “habitable” look like beyond the promise of things always getting better?

This dissertation began with that question. It also began when thoughts of the energy cost of my life bombarded me at every turn—each click, flick of a switch, step onto a city bus. The dazzling lights of the Philadelphia skyline began to look ominous, flashing signals of our impending fall. If energy use was tied up with the civilization narrative of the last several hundred years—more energy meant more production, connection, and discoveries—its decline indicated an image in negative, an exponential decay. As Bradon Smith has noted, much recent popular apocalypse fiction begins when energy supplies run out, throwing the modern world into destructive chaos (147). It seems that narratives about energy have only two options: flagrant, extractive overuse or barebones destitution, apocalyptic scarcity.

This brings me to Gabriela Cabezón Cámara’s quote above, which comes from an interview about *The Adventures of China Iron*, her 2017 novel that I explore in-depth in the final chapter of this dissertation. Cabezón Cámara takes the 1879 epic poem *Martín Fierro*, a canonical civilizational tale in Argentina, and utterly transforms it as a response to the recent feminist movement #NiUnaMenos, the failings of neoliberalism in Latin America, and the climate crisis. The “habitable space” that Cabezón Cámara writes is what I consider to be a new kind of energy narrative, one fit for carving out livable arrangements on a damaged planet. However, her transformation of an Argentine classic has implications that stretch beyond the region. In Latin America, discussions of (and

strivings for) that ideal called “civilization” have been profoundly shaped by the same social and technological processes that led to the global climate crisis. Addressing that history allows me to track how ideas about energy use have been woven into tales of progress, scientific discovery, and the self. Telling new stories about energy offers a way to imagine and build life otherwise.

This project identifies a cohort of texts and films that look to past narratives of civilization and re-write them in such a way to add special attention to energetic issues—modernization, technology, personal ambition, and bodily triumph. While I conclude with Cabezón Cámara’s novel, I spend the first two chapters of my dissertation on antecedents that lay important groundwork and reveal energetic concerns that were present even before the scope of the climate crisis was fully understood. Chapter one deals in the 1970s with *Ema, the Captive* by César Aira and *How Tasty Was My Little Frenchman* by Nelson Pereira dos Santos, two adaptations that grapple with the anthropological definition of “humanity” and how it relates to technology. Chapter two takes us to the 21st century with *Zama* by Lucrecia Martel and *I Travel Because I Have to, I Return Because I Love You* by Marcelo Gomes and Karim Aïnouz, two re-tellings of men “at the edge of civilization,” trying to advance. Chapter three dives deep into *The Adventures of China Iron*, which I argue points us to a possible future forged with the help of what I call “radical energy narratives.” I argue that these re-writings provide an important addition to discussions in Environmental Humanities about how to disentangle unsustainable energy use from desires for life—growth, betterment, change, flourishing, and perhaps even freedom. Like Tsing’s “troubled stories,” it is time for some new energy narratives (34).

The first section of this introduction outlines the historical context and discourses that inform my corpus. I contextualize what “civilization” as a concept and tool of power has meant for the region, and in particular for Argentina and Brazil, the two countries I focus on in this study. The following section puts this “civilization” concept in energetic terms, unpacking how assumptions about the relationship between energy and life have informed civilizational narratives of progress and modernization. After that, I forge a working understanding of energy and its relationship to life outside of the civilizational frame. This definition of energy comes, in part, from recent work in fields ranging from new materialisms to media theory and ecological thought. It is also informed by the novels and films I study which I elaborate on in the chapters that follow. Finally, I outline what my study offers to the fields of Environmental Humanities, ecological thought, and Latin American literary studies: I argue that my corpus points toward a new kind of story, a “radical energy narrative,” that articulates a different relationship between energy and life. This relationship departs from the kind of “survival of the fittest” or anthropocentric assumptions that run through civilization narratives. Instead, I argue that the relationship between energy and life is one of joyous expenditure through collaborations forged with others. I suggest that a livable response to climate change can be found in radical energy narratives which encourage growth, flourishing, and creativity without the expectation of salvation or success. Instead of a guarantee of a better tomorrow, these narratives celebrate our endless, complex relationships with all beings—animal, mineral, or vegetable. They recognize that the “I” is forged in connection, and the world is a teeming phenomenon of relation.

Argentina, Brazil, Civilization

Looking to Latin American re-writings is fruitful because of the rich tradition in the region. From J.L. Borges' story of a Frenchman re-writing *Don Quixote* to Mario Vargas Llosa's dramatized version of the Brazilian classic *Os Sertões*, reworking the canon has become a tried-and-true way to investigate the central role of the written word in the formation of Latin America itself.² Exoticized travel narratives shaped the continents in the European imagination, and political documents circulating in the colonies fueled independence.³ Roberto Gonzalez Echevarría argues that "it is commonplace to say that America was 'discovered' by the printing press that made the news available to many throughout the Western world" (*Myth and Archive* 43). Ángel Rama defines central colonial cities such as Buenos Aires as "lettered cities," where the Spanish colonial power structure largely functioned through text and textuality: educated elites controlled and ordered the colony through a system of written signs (the Bible, maps, grids, and penned orders from the king to name a few).⁴

An inherent civilization narrative is tied up in this centrality of writing and the institution of "Literature" in the history of the region. The presence of *belles lettres* and other "high" forms of expression indexed what was considered a more advanced culture,

² See *The War at the End of the World*, Mario Vargas Llosa, 1981, and "Pierre Menard, Author of the Quixote" in *Ficciones*, 1944. More examples of this approach include César Aira's *Parménides* (2005), Pablo Larraín's *Neruda* (2016), Julio Cortázar's "La Noche Boca Arriba" in *Final del Juego* (1955), and Alejo Carpentier's *Los Pasos Perdidos* (1953).

³ See Simón Bolívar's "Carta de Jamaica" (1815), José Enrique Rodó's essay "Ariel" (1900), José Martí's "Nuestra América" (1891). See also *Imperial Eyes: Travel Writing and Transculturation*, Mary Louise Pratt, 1992.

⁴ See *La Ciudad Letrada*, Ángel Rama, 1984.

further from the state of nature. Cultural elites and the intelligentsia looked to works of literature to define the character of emerging nations on their “path to civilization.” I choose re-writings and retellings because they offer a metacritique of the civilization discourse. César Aira’s *Ema, the Captive* (chapter one) borrows heavily from “La cautiva [The Captive Woman] an 1837 long-form poem that dramatizes (and justifies) the victory of Europeanized creoles over Indigeneity in the emerging nation. *Martín Fierro* (chapter three) was also mobilized by politicians and cultural critics as the poem that embodied the soul of the civilizing nation. Representations of the *sertão* (chapter two), the “uncivilized” national space in the Brazilian imaginary, were crucial to discussions around independence, modernization, and Leftist political resistance to dependence on the “First World” nations.

While civilization narratives are part of the cultural history of the broader region, I focus on Argentina and Brazil because these two countries have seen very robust cultural discussions around “civilization and barbarism” that continue to this day. These discussions stemmed from elite concern about forming a nation-state after colonization that would be able to compete globally in economic and cultural terms. Elites, usually situated in the large cities of Buenos Aires, Rio de Janeiro, or São Paulo, constructed the nation’s “core identity” as wild, influenced by Indigeneity, vast open spaces, lawlessness, and unruly nature. In line with civilization narratives that, as we will see below, understand human development in terms of progress, elites considered this “battle against barbarism” to be a defining requirement of modernization.

Euclides da Cunha's 1902 tour de force, *Os Sertões*, reports on the Brazilian military campaign by the newly formed Republic against a rebellious group in the arid *sertão*, led by a millenarian religious leader that is seen as the epitome of irrationality and backwardness. Later, in the 1920s, Modernist artists sought to re-signify the "savage" as a positive element of Brazilian identity that would set the nation apart from Europe. I treat this movement more fully in chapter one of this project. In analyzing Brazilian film in the latter part of the 20th century, Lúcia Nagib argues that "the problem of a split identity between the native savage and a civilized foreigner still seems to occupy an essential part of the national imaginary" (*Brazil on Screen* 66).

Domingo F. Sarmiento's 1845 text *Facundo: Civilization and Barbarism* epitomizes discussions around Latin American nationhood, civilization, and literature. Part-essay, part-scientific treatise, this hybrid text is a mammoth of the Latin American literary canon because of its agenda-setting force—it is not possible to talk about the history of nation-state formation or modernization in the region without touching on Sarmiento's call for Argentina to choose civilization over its barbaric tendencies stemming from its vast, lawless plains. Echevarría calls Sarmiento's project "the most important book written by a Latin American in any discipline or genre," as well as Latin America's *Phenomenology of Spirit* because it captures the zeitgeist and lays out a theory of the region's historical progress (*Facundo* 1). Comparing the work to Hegel is very revealing of a core element of Sarmiento's liberal theory: Sarmiento understood history as a progressive march toward the most advanced, refined kind of humanity, epitomized in civilization and democracy. His thought was profoundly shaped by European

Enlightenment ideals, as well as by a European-style imagination of Indigeneity and “barbarism” (Sarmiento himself never visited the Pampas, relying only on second-hand accounts).

Getting there was, for Sarmiento, not just about education (literacy, in particular), but also about technological projects. Once Sarmiento became president of Argentina in 1868, he established train, postal, and educational systems to modernize the country. But what is the relationship between “civilized behavior” and trains? Or rationality and writing? Herein lies a very important element of how civilizing, modernizing programs in the region were bolstered by an occluded, yet fundamental, energy narrative. The connection between what is “human” (further from animal) and what is considered civilized is forged through an assumption about how energy relates to thriving life.

In an essay that has greatly influenced the discussion around energy use and human history, Dipesh Chakrabarty asks, “Is the geological agency of humans the price we pay for the pursuit of freedom?” (210). The kind of freedom Chakrabarty speaks of isn’t ahistorical; instead, his provocation is meant to draw a line connecting modern liberal values with the material contexts in which they emerged. In other words, Chakrabarty questions if those pursuits associated with “civilization”—rational inquiry, science, technology, the arts—could have happened without the energy-intensive infrastructures that sped up production, made possible new tools, and allowed for increased movement around the globe. Such a question reveals a profound anxiety about how to craft a less environmentally destructive world. Should a core tenant of the

Enlightenment—human reason—lead the way, or has all the ground it has gained just been soaked in oil, blackened by coal?

One way to answer this question would be to set out to determine the energy costs of cultural production, such as what Vaclav Smil seeks to do with various activities in *Energies: An Illustrated Guide to the Biosphere and Civilization*. However, my project proposes a different approach: instead of focusing on fuel, I disentangle fuel from energy. Indeed, when talking about climate change or clean energy initiatives, what we are usually talking about isn't quite energy but fuel. Fuel is energy in a burnable form; fuel is potential energy that can get burned to produce thermal energy. Fuel is a huge problem for the near future for two reasons: first, the fossil fuels we currently use to power production and human life are nonrenewable and will run out; second, burning those fuels is choking the atmosphere.

An overwhelming amount of work in the Energy Humanities, the energy-specific arm of the Environmental Humanities, has been focused on fuel, from Stephanie LeMenager's concept of "Petromelancholia," Imre Szeman's "petrocultures," Amitav Ghosh's demarcation of "Petrofictions," Jennifer Wenzel's "Petro-Magic-Realism," and so on. While studies on the aesthetics and affects of fuels like oil very much inspired this dissertation project, the thrust of my work is not about what we use to put things to work, but the fact that we put things to work in the first place. My project aims to address the *why* of energy expenditure, and focusing on fuel (the how much, from where, of what)

doesn't quite get to that, and can distract or inadvertently fetishize *one* energy regime as holding the key to them all.⁵

These fuel studies do, however, clarify how stories of capitalist growth, personal triumph, and the feats of humankind rely on the “invisibility” of energy infrastructures (tucked away in pipes, or wired behind the walls), which naturalize the horizons of possibility created by them. This illusion of ease contributes to an “oil ontology,” where our existence is tied up with our experience of using fossil fuels (Scott 10). Whether embedded in the culture, as Szeman suggests, or in the fiber of our being, as Scott does, these scholars agree on one thing: the profound changes to life that are undergirded by energy intensive technologies have made it very difficult to imagine a world organized otherwise. This has quite a bit to do with the narratives that circulate around energy, but it also has to do with how “civilization” and “progress” themselves have been defined.

Energy and Civilization Narratives

David E. Nye was one of the first scholars to define “energy narratives” that explicitly connect physical, infrastructural energy regimes with narrative constructions such as plot and character. Nye has identified two broad sides to American capitalist “male energy narratives” from the 19th and 20th centuries. There is the heroic (comic) energy narrative, which upholds a vision of growth and success due to nature's abundant resources or human technological ingenuity. The flip side of this is the tragic (existential)

⁵ Christopher Jones has a somewhat humorous article about this problem, which he calls “Petromyopia” in the *Environmental Humanities*. However, his solution of studying more fuel sources goes in a different direction than my work here.

energy narrative, where we face doom and destruction because of natural limits and human, all too human, failure (73-6).

On top of explicitly drawing a line between narrative protocols (such as climax, character development) and energy use, what I find useful about Nye's concept lies in the implicit story it tells about energy. The two narrative structures aren't really about energy itself; instead, they follow the logics and assumptions laid out in the concept of "civilization" as it has formed in the West for the last several hundred years. Energy is recruited as simply the sidekick that fuels the engine of "progress:" more energy means a rise in human advancement, less energy collapses into a downfall. This has more to do with "civilization" than it does with energy itself, as I show below. The works I identify in this dissertation recognize this conceptual drift and recruit formal and storytelling techniques to disentangle "energy" from "civilization." It is striking to see just how strange—and generative—"energy" as a concept can be when set free from the teleological cage of the civilization narrative in which it has been so often articulated.

While fully tracking the genealogy of the concept of "civilization" is beyond the scope of my project, I will specify here that when I speak of "civilization," I refer to the theory of human development in terms of progressive stages, from "less" complex (hunter-gatherer, nomadic, without writing) to "more" complex (agriculture, cities, writing). This concept cohered in the 19th century when Darwin's theory of evolution was recruited by others to make sense of the leaps in scientific and technological knowledge that had been taking place since the 16th century. At the same time, the concept was

instrumental in subjugating non-European groups. Henry Lewis Morgan's 1877 work *Ancient Society, or Researches in the Lines of Human Progress from Savagery through Barbarism to Civilization* exemplifies how central the colonial perspective of Indigenous people as "prior" to the West was to this theory:

Since mankind were one in origin, their career has been essentially one, running in different but uniform channels upon all continents, and very similarly in all the tribes and nations of mankind down to the same status of advancement. It follows that the history and experience of the American Indian tribes represent, more or less nearly, the history and experience of our own remote ancestors when in corresponding conditions (xxxi).

The "march of progress" taking place in secular modernity could not be explained without defining from whence it came. Darwin's ever-important theory of evolution, happening at the same time that geologists were making discoveries of ancient human remains, supplied a "biological" explanation of the racist worldview of European superiority. Unlike prior justifications that revolved around Biblical exegesis or the nature of the Indigenous soul, the 19th century "civilization" concept revolved around an implicit theory about the relationship between energy and adaptive life. Excavating this theory has huge implications for understanding how energy use still gets thought about today.

In Morgan's study, the efficacy of food retrieval is a core defining factor for societal organization. More control over subsistence allows for the propagation of the

species and its “advance” from smaller, less organized groups to highly organized civilizations:

The domestic animals supplementing human muscle with animal power, contributed a new factor of the highest value. In course of time, the production of iron gave the plough with an iron point, and a better spade and axe. Out of these, and the previous horticulture, came field agriculture; and with it, for the first time, unlimited subsistence. Prior to field agriculture it is not probable that half a million people were developed and held together under one government in any part of the earth (30).

While Morgan does not explicitly talk about energy, his analysis of technology’s role in civilization—from yokes to bowls to writing systems—signals an argument that works by tracking energy flows. With greater control of energy flows *by humans* comes “more advanced” stages of their evolution.

We can still see this argument operating today, through the work of scholars such as Vaclav Smil, who argues that historically, humans have swapped weaker, less controllable energy sources “for those that pack a more concentrated punch” (Voosen). In order to respond to climate change, humans have to “climb back down the power density ladder, from highly concentrated fossil fuels to more dispersed renewable sources” (Voosen). Broadly speaking, this reflects Alfred Lotka’s law of maximum energy, which argues that human evolution and the development of history can be understood as the quest for controlling greater stores and flows of more concentrated and more versatile

forms of energy” (Smil, *Energy and Civilization* 1). In other words, learning to control fire, developing agriculture, and then industrialization can all be understood as a quest to getting more bang for our fuel buck. Each innovation made the getting of food (supplying metabolic/caloric energy) easier and put humans in more control of greater and greater energy flows.

Embedded in this line of thinking is an important assumption about how technology (or technics) relates to energy. Technics, deriving from the Ancient Greek *technē*, refers to the practice of making—of working with and gaining knowledge about material in order to put it to work for something else. Technology is the product of technics, and technology does what it does by directing, enhancing, or exploiting flows of energy outside of (or alongside) the body. The hammer or axe increases the amount of force the human body can exert on an object; the writing utensil increases the distance a piece of information can endure (and travel) through space and time. Indeed, Morgan’s own theory considers writing to be central to the birth of civilization, an argument that is taken up later by anthropologist Claude Lévi-Strauss and his influence on Latin American art, as we will see in chapter one.

Morgan’s explanation for the rise of civilizations is resolutely materialist, looking to the conditions of production as that which shapes social institutions such as family and property relations. Indeed, in the foreword to *Ancient Society*, Elisabeth Tooker notes that Morgan’s argument caught the interest of Karl Marx, who thought Morgan’s ideas “extended his own materialistic examination of history back to prehistoric times”

(*Ancient Society* xvi). She notes that although Marx died before he was able to directly use Morgan's work, it made its way into Friedrich Engel's *The Origin of the Family, Private Property, and the State*. It is not difficult to see the points of convergence between historical materialism and Morgan's own explanation for what drives different forms of social arrangement. On the one hand, Marx and Engels centralize the role of human labor power; on the other hand, Morgan focuses on human innovation in relation to its environment. But both frameworks implicitly rely on how energy is controlled and work their way up from there to a more general social explanation.

Later, Anthropologist Leslie White would make this implicit link explicit, arguing that social structures are in a dialectical relationship to the energy regime that fuels them. If "the ancient and time-honored institutions of tribal society could not accommodate the greatly augmented forces of the agricultural technology," the structure of capitalism, too, would have to give way to a different social order if innovation continues and energy use increases ("Energy" 349). Writing during WWII, White was aware that coal and petroleum would be eventually depleted. A (somewhat secret) critic of capitalism, he theorized that solar and nuclear power could be promising areas of growth that would reshape labor relations through shortened working days and more wealth available to all. Aside from our deepened knowledge about the detriment of fossil fuels and the dangers of nuclear power, not all that much has shifted in popular discourse around energy. The talking points now are renewable energy and enhanced efficiency, but certainly not drastically cutting back our energy needs or halting technological innovation. The goal

remains, in broad strokes, constantly improving access to material resources, which in turn provides more freedoms.

Although Morgan and White's evolutionary theories of societal change have fallen out of vogue in the field of Anthropology, their core elements have never left the popular imagination. For example, the political imperative for countries to always keep growing, progressing, and improving has had as much cache in Latin America as it has in the United States where these theories were first produced. So, too, has the assumption that *lessening* production or scaling back technology will see a correlated slippage into "prior" stages. This concern resonates with Tomas Elliott's "anxiety of evolution," an implicit worry he detects in artworks regarding our (not so distant) relationship with the animal kingdom, in particular apes (15). The anxiety plays out as attempts to define exactly where "humans" begin and "animals" end.

The "civilization and barbarism" discourse, outlined above, clearly displays this anxious preoccupation. While civilization must certainly win in this discourse, it is important to note that barbarism holds a certain allure, functioning, as Josefina Ludmer argues, as the "outside" that constitutes and defines the "inside."⁶ Both Da Cunha and Sarmiento's lengthy descriptions of the landscape and the peoples found there betray a sublime fascination with what Echevarría calls the "Other Within, created by the split of Latin American society into urban and rural worlds as a result of modernity" (96, *Myth and Archive*). This anxious fascination with human beings' "roots" in nature's cycles

⁶ See *El género gauchesco: un tratado sobre la patria*, Josefina Ludmer, 2000.

comes up in many other canonical classics of Latin American literature, such as *One Hundred Years of Solitude* (Gabriela García Márquez) and *The Labyrinth of Solitude* (Octavio Paz).

The anxiety is not only how to define the human, but also how to ensure progression, adaption. This concern to differentiate (and supersede) that which came before relates to an important tension that runs through Morgan, Marx, and White: it is the nature and structure of power. While White's materialism is so technologically determinist it is almost comical ("A social system is a function of a technological system"), his focus on energy reveals an important sensitivity to power dynamics that speaks volumes to the climate crisis today (*The Science of Culture* 365). If Marx's analysis of social structure is, to put it in layman's terms, "who has power over whom?", Morgan and White's is "what is the power switch, and how much voltage does it provide?" But, for all three, understanding social dynamics necessitates identifying power dynamics. Addressing the climate crisis today requires looking at power as both a social question and an energetic one.

While Morgan's (and White's) stadial theories of human development are based in racism, there are some key elements of their thought that prove instructive. The first, as Dominic Boyer has so helpfully argued, is "the notion that modern capitalist society was a fuel society to its core; its achievements were fundamentally predicated on fuel consumption" (311). The power dynamic at work in capitalism involves, necessarily, a reliance on cheap, "abundant" energy (in the form of fossil fuels and in the form of

workers' bodies).⁷ The links between capitalism, Social Darwinism, and fossil fuel usage have been well-documented, but Boyer argues that what these links fundamentally say about *energy use itself* remains underdeveloped.⁸

To remedy this, Boyer introduces the term “energopower” in 2011. Building off Michel Foucault’s concept of biopower, energopower “rethinks political power through the twin analytics of electricity and fuel...one that searches out signals of the energo-political transferences and transformations incorporated in all other sociopolitical phenomena” (325). His framework links energy to power through a highly telling etymological observation: *pouvoir* (power in French), from the Latin *posse*, means to-be-able-to-do; “power” in physics is the “time rate of doing work or delivering energy” (*Encyclopedia Britannica*). In other words, the physical definition of power reveals an important element of a sociopolitical one—the more power you have, the more control you have over energy flows (the more you are able to get done). Control over energy flows could happen through a number of ways—control over the price of oil, control of a waterway, control of mass infrastructure, control of the working class.

The second thing that re-visiting Morgan and White’s analyses offers my argument is the evidence of an assumed—and yet implicit—relationship between energy and adaptive life. The idea is that the more energy you have control over (in other words, the more power you have), the more advanced you are—the more adaptive, the “fittest”

⁷ For a more thorough explanation of the relationship between capitalism and “cheap” nature, see *Capitalism in the Web of Life: Ecological and the Accumulation of Capital*, Jason Moore, 2015.

⁸ See “Charles Darwin and the Victorian Pre-History of Climate Denial,” Allen MacDuffe, 2018; *Electrifying America: Social Meanings of a New Technology*, David Nye, 1990; *Fossil Capital*, Andreas Malm, 2016.

for survival. This is an important misinterpretation of evolutionary theory, but the grounds of it actually come from an energy narrative that is much, much older than Darwin's discovery. This narrative "explains" human superiority: humans, separate (and superior) to nature, can control it; they are at the top of the Great Chain of Being.⁹ Recently, this Western concept has been tied to the "Anthropocene" concept, the name given to mark today's geological era as one in which human activity shapes climate.

Darwin's theory of natural selection does not understand the process of adapting to be the same thing as optimizing—a mutation just happens to work in the given context in which it has sprung up. It isn't designed, and it isn't necessarily the most "optimal" adaptation possible. Adapting isn't about gaining absolute control over a given niche but remaining in balance with it. What I'm getting at is that there is no "most powerful species." Humans, at the very least, would most certainly not be the most powerful in this sense: indeed, our astronomical power requirement is putting our own species at risk (so how powerful is that?). We can even meaningfully track this error in Marx's own analysis, as he considered the dynamism of capitalist production to be what catapulted society away from feudal power relations. Marx, after all, agreed with a Hegelian understanding of history, which is progressive. All three thinkers were right to analyze the history of the human species through its control energy flows. But that doesn't mean greater control over energy flows is always advantageous.

⁹ For more on this concept, see the Stanford Encyclopedia of Philosophy entry on "Neoplatonism."

Even if White's technological determinist argument and Morgan's ethnocentric appraisal of stages in human development don't fly today, this misappropriation of evolutionary theory remains embedded in cultural discourse, particularly when energy, life, and development come up. Is using more energy better? Is using less? What is the relationship between energy efficiency, or even energopolitical dominance, and human flourishing? For that matter, what does it mean to flourish, what does it mean to live? Here it becomes clear how the supposed relationship between energy and adaptive life is crucial to the energy narratives we tell, the political programs we support, the versions of the future we can imagine, and the values we believe in. Assuming that enhanced power means surviving (or thriving) misses the basics of ecology and how organic life works in a give-and-take relationship with others—animal, mineral, or vegetable. So, what is the relationship between energy and adaptive life? This question runs through all of the works I analyze in the chapters that follow. It is a question that is crucial to the stories we tell about climate change, how we got here, and where we can go.

Energy Without Civilization

The relationship between energy and thriving, adaptive life is just as contested in science as it is in cultural production and politics. To get here, it is useful to first just try to define energy. As energy scholar Vaclav Smil has noted, “energy” is a fairly tricky concept to pin down; there isn't a clear definition of it. His provocation that “Energy is the only universal currency” because “one of its many forms must be transformed to get anything done” can help to explain why (*Energy and Civilization* 1). Energy isn't a *thing*

unto itself, but a capacity to do work, a flow, a transfer. Energy isolated or out of context is practically a metaphysical idea because energy is usually understood in terms of one of its forms, such as potential, chemical, thermal, or kinetic energy.

Trying to cut past energy's distinct forms to get to what energy itself *is* becomes tautological very quickly: energy makes matter move and transform; at the same time, matter is energy at rest. Pinning down energy is like trying to capture and isolate change and flux itself. Manuel DeLanda, following the work of Gilles Deleuze, brings matter and energy together in a synthesized definition of reality:

In a very real sense, reality is a *single matter-energy* undergoing phase transitions of various kinds, with each new layer of accumulated 'stuff' simply enriching the reservoir of nonlinear dynamics and nonlinear combinatorics available for the generation of novel structures and processes. Rocks and wind, germs and words, are all different manifestations of this dynamic material reality, or in other words, they all represent different ways in which this single matter-energy expresses itself. (21)

By collapsing matter and energy into one metaphysical category, DeLanda strives to understand the world in terms of intensity, interaction, and becoming. Things are like snapshots, only discrete and unchanging when captured in an instant. DeLanda, along with other thinkers in the new materialist and affective persuasions, shifts attention from the *doer* to the *doing*, flattening the ontological perspective. From this viewpoint, there is no hierarchy, no Great Chain of Being or more advanced action. Nor, for that matter, is

there a hierarchy of intensity—more intensity (more power, more energy) is neither absolutely better nor absolutely worse.

This perspective poses a number of problems. One has to do with agency, a concept that is, as I show in this dissertation, profoundly tied up with energetic questions. Who (or what) caused the climate crisis? What does the human burning coal contribute to the problem, and what does the coal itself contribute? Put another way: are humans alone to be blamed for using tools, innovating, and seeking more control over energy flows, or are fossilized forms of prior organic life also stars in the great ironic tragedy that is climate change? What is the relationship between energy and life that is adapting?

We know that life needs energy to function. Life is negentropic, meaning that it (temporarily) eludes the second law of thermodynamics, or entropy. This law explains why a hot cup of coffee will gradually get colder, eventually coming to match the temperature of its surrounding environment. The molecules in the hot coffee are moving faster than those in the room it is sitting in, meaning that there is a higher amount of energy localized in the coffee than in the air surrounding it. The second law of thermodynamics explains that the localized energy will move towards a dispersed state, i.e. the coffee will gradually give off thermal energy until it reaches the same temperature as the room. This is how entropy works: as energy moves along conversion chains, its usefulness (ability to do work) decreases. As Smil puts it, “a basketful of grain or a barrelful of crude oil is a low-entropy store of energy, capable of much useful work once metabolized or burned, and it ends up as the random motion of slightly heated air

molecules, an irreversible high-entropy state that represents an irretrievable loss of utility” (*Energies* 9).¹⁰ Whatever electricity it took to make the hot coffee in a coffeemaker ends up dispersed around the room, not accomplishing much of anything.

This process is non-reversible; in other words, the coffee cannot heat back up unless more thermal energy is introduced to it (or to the whole room—imagine blasting the heater, gradually increasing the temperature of not only the air, but of all the objects inside the room). Life doesn’t work like this, at least not until it ends. Living organisms import energy from the sun (directly, for plants, or indirectly for those that consume plants) so as to maintain a state of chemical and thermodynamic disequilibrium with their surroundings. While this would seem to disprove the second law, there is no paradox, as the localized energy at work in the living system is “paid for” by giving off heat into the environment. As Natalie Wolchover puts it: “We are super-consumers who burn through enormous amounts of chemical energy, degrading it and increasing the entropy of the universe, as we power the reactions in our cells” (“First Support”).¹¹ But what this tells us about the *meaning* of the relationship between energy and life is much more complicated, and quickly introduces ethical and political issues around energy use.

Eric Schneider and Dorion Sagan argued in 2005 that life came into being *because* “nature abhors a gradient” (6). In other words, life sprung up in order to dissipate energy, to decrease “the huge solar gradient between hot sun and cold space, growing in

¹⁰ It is interesting to note that laws of thermodynamics were discovered when scientists and engineers tried to make more efficient steam engines (Schneider and Sagan 4).

¹¹ I am indebted to Cory Knudson for bringing this article to my attention.

complexity as it does so” (8). This hypothesis resonates with recent work by biophysicist Jeremy England, who argues that the origin of life is “an inevitable outcome of thermodynamics” due to what he calls “dissipation-driven adaptation” (Wolchover, “First Support”). Under certain conditions, in settings far from thermodynamic equilibrium, groups of atoms will start to tap into the highly localized energy and will use it to rearrange themselves in ways that will dissipate more energy, such as complex life forms and self-replication. England quips, “You start with a random clump of atoms, and if you shine light on it for long enough, it should not be so surprising that you get a plant,” (“A New Physics”).

While it is observable in today’s conditions that life forms decrease energy gradients, and England has been able to track atoms behaving in this way in highly structured experiments, these findings do not yet answer if this is *how* or *why* life began. In other words, it is still unknown if the beginning of life itself was a stroke of luck or a consequence of the same kinds of evolutionary laws that then explain its adaptations once it began. Making this distinction is important for the ethical and political consequences of understanding life as energy consumption. Read in one way (as Social Darwinists did), the takeaway from these theories could be that humans are simply gas guzzlers because *nature has it be so*. This would suggest that it is our right to burn fuel because this is how we adapt. The “naturalization” of today’s economic and social structures is dangerous, to say the least.

Read another way, these theories can also complicate notions of human agency and social constructivism. While it is clear even to the staunchest critics of New Materialism that there is no *one* simple cause to climate change, many have warned that asking questions in this frame drains political or social critique from the equation. This resonates with a similar issue raised about the “Anthropocene” label itself, which would suggest that humans *as a species* have become geological agents. Scholars attuned to the histories of colonization and capitalism argue that this denomination unfairly places the blame worldwide, when in fact the greatest polluters have been Imperial powers, particularly in the Global North. Jason Moore has suggested the revised “Capitalocene” while Donna Haraway has suggested the “Plantationocene” or even the “Chthulucene,” after “the diverse earth-wide tentacular powers and forces and collected things like names like Naga, Gaia...” (*Anthropocene* 160).

Jane Bennett, another main voice in the New Materialist discussion, cautions that a horizontal shift would seem to throw morality or ethics out the window. If humans and things are on the same ontological level, then how can humans truly be held accountable? Bennett’s answer is to focus on thing-power, which aims to understand human power in relationship to other forms of power. Her point, like DeLanda’s, can be understood as putting “energy goggles” on everything. Also using the Deleuzian concept of assemblage, Bennett focuses on gatherings such as the electrical power grid, which is “a volatile mix of coal, sweat, electromagnetic fields, computer programs, electron streams, profit motives, heat, lifestyles, nuclear fuel, plastic, fantasies of mastery...economic theory, wire...” (25). This assemblage is made up of various material parts that are “lively and

self-organizing” rather than “passive or mechanical means under the direction of something nonmaterial, that is, *an active soul or mind*” (10, my emphasis).

Following in the language of Spinoza, whose work greatly influences thinkers in this lineage, you either affect or are affected, resulting in either diminishment or augmentation of power (in other words, the rate of delivering energy or doing work). It is a question of energy flow, which transfers from one actant to another. However, I don’t consider this shifted perspective to suck all of the lifeblood or agency out of the world, reducing everything to deadened mechanisms of cause-and-effect. Instead, what I’m suggesting is that a properly energetic perspective allows what Bennett calls the “active soul” to get meaningfully reintroduced to the climate conversation. This is precisely where energy narratives have been quietly doing their work all along—linking energy to the soul, modernization to flourishing, movement to triumph. The energy narratives that shaped Latin America, however, are getting re-written to recalibrate what is meant by “flourishing” outside of a civilizational frame.

Soul is a thorny word, but for the purposes of my project I will define it according to a Western, Modern philosophical framework, which has stuck around in the practice of the (Western-focused) humanities in North and South America. It is as follows: as that which is set against the body as immaterial; that which animates a body, makes decisions, and exercises agency; and that which would be considered the distinguishing element of a bodily system—in other words, what makes you “you.” While discussions in the humanities today around agency, the meaning of life, or the mind/body connection do not

usually use the word “soul” as a central organizing concept, these are still very much “soul problems” and are often at the center of discussions in the Environmental Humanities around climate change. Soul is just another word for animating force outside of a strictly mechanical, cause-and-effect frame. The word recognizes a level of mystery, of incalculability, that exists in the world outside of heavily designed science experiments. As we will see, it is also a very helpful framework for thinking about energy problems.

Bennett’s point about the electrical grid, an example of what she calls “vibrant matter,” is that the coming together of so many different actants (engineers, wires, flows, etc.) elevates the complexity of the assemblage to a level where a very simple cause-and-effect analysis (if I do this, it will do that) usually misses something. This isn’t to say that the electrical grid *has consciousness* in the same way an individual person does, but instead that what we think of as individual agency and this collective of *stuff* that does things in the world are perhaps not so unlike one another. Her framework de-subjectivizes the subject and de-objectifies the object, recognizing the boundaries between the two as porous, and agency and affect as more dispersed. Taking my cues from Bennett, DeLanda, Deleuze and Spinoza, my point isn’t to squash questions of agency, meaning, or uniqueness, but to consider these “soul elements” as properly energetic, and energy problems as related to the soul.

The philosopher Georges Bataille already posited this link, albeit in different words, in his 1949 work *The Accursed Share: An Essay on General Economy*. Critiquing

economists like John Maynard Keynes, Bataille argues that the “general economy” of the universe does not function in terms of necessity or rationality but in terms of extravagance and uselessness. He warns that “economic science...restricts its object to operations carried out with a view to a limited end, that of economic man,” missing the more “general” movement of energy in the open system of the galaxy (23). Life on earth takes after the sun, dissipating localized energy for no final end other than simple expenditure. Some of the solar energy lavished upon the earth gets rerouted into useful ends, such as cell repair or sexual reproduction, but there is always excess energy that goes nowhere, that contributes to nothing (22). Bataille traces this to human destiny, which isn’t to fulfill some great purpose, but instead to waste it: “The general movement of exudation (of waste) of living matter impels [man], and he cannot stop it...it destines him, in a privileged way, to that glorious operation, to useless consumption” (23).

Bataille considers dealing with this truth to raise an inherently religious issue, as day-to-day (mostly purposeful) activity gets subordinated to a much larger cosmic dynamic beyond any individual’s control. Societies, he contends, recognize this: whether in the form of sacrifice, self-denial, war, or some other form, religion recognizes and disposes of that excess remainder that cannot be used usefully. Indeed, that joyous and anguished moment of waste recognizes that flows of energy (or Gods) have sovereignty over humans, not the other way around. It is categorically impossible to transfer every moment of existence into something useful. And no matter how well spent, or productive, life ends. Energy passes through, moves us, and then moves on, neither created nor destroyed. Like the sun, we burn out. Ironically, the best way to have a meaningful life is

to recognize its inherent purposelessness, and to *make* meaning from that by expending energy. This is what religious festivities do, or art-making; it is also, unfortunately, what war does.

Bataille's thinking is so useful because he starts his line of questioning where political economists (particularly those of the neoliberal moment) stop: the limits of utility and productivity. Bataille, worried about a nuclear war, wanted to think of ways to partake in waste and destruction that are less, well, apocalyptic. Bataille's theories were no doubt influenced by physicist Georges Ambrosino, a contemporary of Ilya Prigogine (the "progenitor of the theory of dissipation-driven adaptation"), as well as his involvement in the *Collège de Sociologie* group (Knudson). The group's interests reflect a wider French trend at the time towards primitivism, with main member Roger Caillois spending extended periods of time in Argentina and Brazil. The group was very invested in concepts arising from studies of Amerindian groups, such as those of potlatch, cannibalism, and human sacrifice.

At a difference to Indigenous groups that get rid of surplus through sacrifice or parties, Christian, Western cultures base their metaphysics upon usefulness and ultimate salvation, fundamentally misrecognizing the cosmic laws of energy flow. Promising that all the work in *this life* will pay off in the next creates the false hope that energy spent can one day be recouped. Just as Max Weber argues that capitalism began partially due to the "Protestant ethic" of wealth accumulation and investment, Bataille argues that the failure of capitalism isn't that it uses so much energy, but that it perversely *reinvests* the surplus

(116-120). This can only lead to expending *more* energy, but the moment of “expenditure”—what Cory Knudson calls the “letting off of cosmic steam”—is continuously deferred (“Fuel Cuts”). Capitalism’s law of growth without limit directly contradicts the laws of the universe, and its imperatives for individuals to consume merchandise (or overwork) in order to gain meaning leads only to further dissolution. The other problem with capitalism is that it focuses on (false) scarcity and competition for the “few” resources on the planet, instead of focusing on the uses and distributions of excess wealth.

Allan Stoekl, the first contemporary scholar to explicitly link Bataille’s theory to climate change, argues that capitalism’s denial of the escape valve sees “useless” energy expenditure cropping up in other ways: large-scale forest fires, treacherous storms, mass death, species extinction, and crippling heat are other forms of the necessary sacrifice that must lead nowhere, contribute to nothing, and refuse utility. Interestingly enough, Stoekl notes that Bataille’s theory is also (implicitly) based upon a broader cultural assumption of the 1940s—the idea that the availability of fuel is endless and burning it is not an issue (41). Stoekl’s update to Bataille’s theory, which he calls “postsustainability,” suggests envisioning “a model of expenditure that, [involves] not the expenditure of a standing reserve of eighty million barrels a day of oil, but the wastage of human effort and time” (59).

While my work is very much indebted to Stoekl’s, my project’s interest in the soul partially departs from his update of Bataille, which mostly leaves “soul problems”

aside in favor of what John Durham Peters would call a “happy cosmic nihilism” of nothing mattering (384). The works I study are still very much interested in making meaning out of energy use in ways that go beyond simply a framework of waste. Further, Stoekl’s study exemplifies a more common tendency in uptakes of Bataille, which put his thought in dialogue with artwork that is about waste, garbage, and base matter. None of the works I study in this project traffic heavily in waste; instead, I am interested in how they transpose civilizational themes into energetic ones, revealing limits to progress narratives and gesturing toward other kinds of stories that generate meaning from relationality and cosmic belonging.

Radical Energy

Building on Stoekl and Bataille, as well as New Materialisms, I propose a theoretical framework of radical energetics, which understands the dynamics of reality in terms of energy. It also names the tendency of life to be *desiring and using energy*. However, much like DeLanda’s call to not moralize differing levels of intensity, I reject qualifying the relationship between energy and life in moral or ethical terms. The 19th century “heat death” hypothesis, as well as deploying prohibitive tactics (denying the body, social control), would cast energy use as morally wrong, unwittingly playing into Western frameworks of sin and shame. Guilt is currently one of the main strategies deployed in popular discourse around how to combat climate change. The other main strategy is techno-optimism, which reifies technics and human rationality as inherent

goods. This strategy also fails, as it relies on the civilization narratives of linear progress and dominance over the earth. Energy use itself is neither moral nor ethical, but ontological. By this I mean that it is woven into being itself.

If energy use is a vital tendency, then energetics must be central to a cultural and political response to climate change. While conservation (“use less”) and techno-engineering (increased efficiency) are generative approaches, neither really addresses what it means to use energy in the first place. The purpose of this project is to sketch out the implications of this question through re-writings that place energetics at the center of inquiry. What I found is as follows: desire for energy and desire for life do not have to mean domination, extraction, or individual freedom as it has come to be understood in contemporary capitalism. The works of chapter one teach me that technics are not related to “civilization” in the classic sense, but to a creative (and sometimes destructive) vital desire. The films of chapter two show me that ambition is a desire-for-life that has been channeled into individualism and masculinity in line with the state. The novel of chapter three lays a possible, radical path forward, forged with a thirst for exploration, an excitement about life, and an understanding of being itself as forged in relation.

It is from these lessons that I derive the framework of radical energetics. I propose a “radical” approach in two senses: first, in the sense of going back to the “root” (from the Latin *radix*) and second, in the sense used by William James in his definition of “radical empiricism,” which considers relations between things to be just as real as the things themselves. Going back to the root: matter and energy are bound up with each

other, and whether this is “good” or “bad” is the wrong question. The question instead is what to *do* with this fact. Instead of expecting all the energy spent to be worth something (a return on investment), radical energetics departs from this cost-benefit analytic and posits using the energy just to use it—growing to grow, creating to create. This sentiment, which is joyful and celebrates of energy expenditure, is not about accumulation or exploitation, but about life itself, which must eventually burn out in order to shine.

Another radical energetician is Fiona Apple, who in a recent lyric expresses the sentiment well:

On I go, not toward or away
Up until now it was day, next day
Up until now in a rush to prove
But now I only move to move

Radically anti-capitalist, anti-productivist, and feminist in nature, Apple sings here about movement without telos (“not toward or away”), without program (“up until now it was day, next day”), and without social decorum (“up until now in a rush to prove”). Apple’s lyric rejects the implicit energy narrative of modern-day capitalism—the very narrative that helped shape the climate crisis. But it doesn’t, for that reason, call for energy use to cease. Movement is necessary; movement is life.

But what if I just hop on a plane, then, and guzzle all the gas I want, because that is the best way to spend the most energy? How to prioritize energy use in a way that is

not destructive or feeding us illusions of “freedom” we can purchase? This is where the second aspect of “radical” comes in. Searching for a frame of analysis somewhere between empiricism (a real in itself) and idealism (starting with concepts), James lands on an approach in the middle of things, “the blooming, buzzing confusion” of it all (488).¹² By regarding relations as real, James reorients our attention to a profound ethics of care for the other. By recognizing that my relations with others in the world (animal, mineral, or vegetable) are real—that the relation does things just as “I” “do things” or the rock “does things”—I come to see that there is no “I” that is not bound up intimately with others. Every relationship constructs the world.

How to align oneself with this reality of intimate relationality brings me back to why I have focused so heavily on the soul in this introduction. While Stoekl mostly dismisses religious responses, I’d like to turn back to that aspect of Bataille’s thought, because the kind of hope associated with religion recalls the sentiment with which I opened this introduction: Cabezón Cámara says, “Writing gave me the chance to construct a habitable space in the world, it helped me live” (“El Diletante”). I take her “habitable space” as playing in a different key than the original civilization narratives that inspired the artworks treated in this dissertation. Making something livable, making it workable, is different than triumph, or beating climate change outright, or getting saved. It is different than being the smartest or the most powerful. These pursuits ignore the fundamental loss associated with being matter moved by energy. Perhaps they even make

¹² I am indebted to Richard Grusin’s article “Radical Mediation,” which also makes use of James’ work in this way and inspired me to consider relationality in energetics.

the destruction worse. But this subtle shift in approach doesn't mean there is no hope. How to confront what Stoekl calls the "cataclysmic loss of the universe" is at the heart of religion for Bataille, and at the heart of my use of "soul" to frame and understand energy use (143).

Indeed, bringing questions of energy into conversation with questions of the soul further clarifies how the type of energy I speak of here is not quantifiable in the same way that fuel is, as I discussed earlier. But I contend that addressing runaway fuel usage means also addressing energy usage. Another important aspect of the habitable: living means using energy. But recognizing that energy may just be another way of figuring the "soul" offers a hopeful, if tempered, response. While it may seem like focusing on the soul would be similar to focusing on the subject, the individual, or the transcendent, I follow in Michael Pollan's conclusion that arises from his study of spiritual experiences while on psychedelics:

The usual antonym for the word 'spiritual' is 'material'...Now I'm inclined to think a much better and certainly more useful antonym for 'spiritual' might be 'egotistical.' Self and Spirit define the opposite ends of a spectrum...When the ego dissolves, so does a bounded conception not only of our self but of our self-interest. What emerges in its place is invariably a broader, more openhearted and altruistic—that is, more spiritual—idea of what matters in life. One in which a new sense of connection, or love, however defined, seems to figure prominently.

(390)

If “soul problems” such as agency, meaning, and the boundary between self and other are “energy problems,” writing new energy narratives could imagine and point to meaningful ethical shifts that de-center the individual human and suggest other ways to live in deep connection—what Anna Tsing calls “precarious collaboration”—with others. As I’ve shown in this introduction, the older energy narratives did very much to contribute to climate change today. In the chapters that follow, I identify re-writings of Latin American civilizational narratives that re-center energy in different ways, paving the way for what I term “radical energy narratives.”

There is a difference between living to use energy and using energy to live. It is here precisely that my thinking departs from Bataille by way of ecological thinkers like Eduardo Viveiros de Castro, whom I treat extensively in chapter one. Here is the difference: living to use energy rests in the fantasy of fulfillment or revels in freedom from responsibility; using energy to live is pragmatic, vibrant, and oriented toward others. Put another (more overtly Christian) way: living for (the sake of) the soul—as traditional Christianity would suggest, as time on Earth is time spent determining if the soul will go to heaven—plays differently than engaging one’s soul to live fully. Engaging one’s soul, in Pollan’s suggestion, is about being in relationship to others. It is also, as I hope this project shows, energetic.

Outline of the chapters

In chapter one, entitled “Savagery and Technology at the Beginning,” I analyze a Brazilian film, *How Tasty Was My Little Frenchman* and an Argentine novel, *Ema, the Captive*, from the 1970s. While the “source” material for each object varies widely—*Ema* is an ironic uptake of a late 19th-century nationalistic poem and *How Tasty* retells a 16th century account of a German held captive by cannibalistic Tupis—both adaptations use the stories to explore the anthropological definition of “human,” the divide between nature and culture, and the role of technology in power dynamics. These problems are explored through tropes of the “beginning” of humans or civilization. I argue in this chapter that these concerns are latently shot through with meditations on energy. By framing my analysis in energetic terms, I am able to read the figure of the cannibal in both works—the dividing line between savagery and civilization *avant la lettre*—as a crucial update to the production-oriented, techno-utopic politics of the first half of the 20th century. In particular, I reread the 1928 Brazilian “Cannibalist Manifesto” through its uptake in the 1970s. I argue that the transformed power dynamics of cannibalism, met with a decolonized zeal for technology and innovation, paves the way for a different kind of energy narrative, one familiar with the limits of development and fuel.

Taking on technology allows me to address the core elements of the civilization narrative and the nature/culture boundaries it upholds. It also allows me to take on another fundamental element of this narrative: that of the individual, the self. The figure of the masculine hero is the central energy narrative of chapter two. “Masculine Energy

at the Edge of Civilization” focuses on two 21st century films, *Zama* from Argentine director Lucrecia Martel, and *I Travel Because I Have To, I Return Because I Love You* from Brazilian directors Marcelo Gomes and Karim Aïnouz. Both films penetrate the psyches of problematic, violent, and misogynist male protagonists, hemming their arcs into broader narratives of colonization and nation-building that shaped these two regions. *Zama* is an adaptation from a 1956 novel of the same name that shares in Martel’s critiques of colonialism, masculinity, and self-absorption. However, Martel’s adaptation takes a very descriptive, baroque, and wordy novel and transforms it into an intense sonic and visual experience of discomfort and confusion. *I Travel* shares *Zama*’s interest in the texture of the film form, using found footage from previous documentary projects and unexpected audio to deliver a poetic experience of the Brazilian backlands. I argue that the complex treatment of the male heroes can be quite productive and reparative when framed in terms of energy. By foregrounding bodily (and technological) power, visions of the all-powerful self, and domination as energetic desires, the films identify what can (and should) be salvaged for radical energy narratives of the 21st century. They do this, I conclude, through their transformative endings, which take the narrative of the masculine self and disperse it to nonhuman, ecological, and horizontal domains.

My final chapter doesn’t so much show what civilizational energy narratives *aren’t* so much as what radical energy narratives *are* and can be. Cabezón Cámara’s novel *The Adventures of China Iron* exists in the interstices between the dichotomies and boundaries set up in the civilization narrative: nature and culture, self and other, violence and tenderness, progress and disaster. I read her feminist retelling as radically energetic.

Movement, discovery, and dissolution of the self pave the way for a story of community forged in paradise. Her vision may be utopic, but its pleasurable contours, lush descriptions, and infectious vitality make a point that is anything but: if we are to carve out a habitable space in the world, it must come from a place of activity, relationality, and life without *telos*. The coda, “Radical Energetics at Home,” steps away from paradise to look at praxis. I identify an example of radical energetics in the recent Argentine film *La Flor* by Mariano Llinás.

CHAPTER 1: Technics and Savagery in the Beginning

“A luta entre o que se chamaria Incriado e a Criatura—ilustrada pela contradição permanente do homem e o seu Tabu. O amor cotidiano e o *modusvivendi* capitalista. Antropofagia. Absorção do inimigo sagrado. Para transformá-lo em totem.

[The struggle between what we might call the Uncreated and the Creation—illustrated by the permanent contradiction between Man and his Taboo. Quotidien love and the capitalist *modus vivendi*. Cannibalism. Absorption of the sacred enemy. In order to transform him in totem.]”¹³

- Oswald de Andrade, “Cannibalist Manifesto”

Oswald de Andrade’s 1928 “Cannibalist Manifesto” is an instantiation of its own rallying cry. Andrade’s call for Brazilians to metaphorically devour European culture for their own (anti-colonial) uses is itself inspired by anthropological and psychoanalytic concepts of the primitive. Benedito Nunes argues that “From Nietzsche to Freud, exists a path that made of cannibalism *a sign of an ancestral syndrome*, or if we use Oswald’s terms, a semaphore for the human condition” (B. Nunes, *Oswald*, 13). Cannibalism had been functioning in European thought as a dividing line between “uncivilized” and “civilized” for hundreds of years.¹⁴ In Sigmund Freud’s *Totem and Taboo*, the primitive eats their progenitor to garner independence; the modern, instead, represses the so-called rule of the father (141). By cannibalizing Europe’s “rule of the Father,” Brazilians will free themselves from Europe’s culture of repression and craft a new one that is distinctly

¹³ My translation.

¹⁴ See Michel de Montaigne’s 1580 essay “Of Cannibals.”

modern and distinctly Brazilian. *Moving forward* necessitates *going back*, all the way to the beginning of “humanity”: the separation of humans (the “Created”) from the “Uncreated.”

While Andrade’s manifesto, and many of the theories it dialogues with, try to de-center Eurocentrism in their studies of Indigenous lifeways, they still rely implicitly on its civilizational energy narrative. This narrative, as we saw in the introduction, traces the beginnings of “humanity”—the separation of culture from nature—to the first uses of technology (controlling fire, inventing the wheel, you know the rest). Andrade suggests that by returning to cannibalism, and thus closer to this moment of “separation,” something fundamental can be recovered. This totemic shift can be used to address the ills of civilization in all its repression in order to now *truly* progress. But does this subversion challenge the energy narrative it bolsters?

This chapter addresses this question through analyzing two artworks from the 1970s that stage this question. The film *Como era gostoso o meu francês* [*How Tasty Was My Little Frenchman*] (1971) and the novel *Ema, la cautiva* [*Ema, the Captive*] (1981) re-write and critique older civilization narratives through the lenses of 20th century anthropology, European primitivism, and cannibalism. In doing so, they implicitly question the energy narrative at work by focusing on technology and colonial power dynamics. I put the film and novel in conversation with recent Brazilian theories of cannibalism, as well as bio-technical philosophies of technology, to draw out the energetic implications of their anti-colonial critiques. In the conclusion, I contextualize

the energy and technology problem detected by the novel and film within environmental issues of the 1970s.

Nelson Pereira dos Santos's 1971 film *How Tasty Was My Little Frenchman* is an adaptation of the 1557 *The True History and Description of a Country Populated by a Wild, Naked, and Savage Man-munching People, situated in the New World, America...* by German explorer Hans Staden. Staden's eyewitness account tells of his time in captivity of different Tupi tribes in what is now Brazil. He claims to have narrowly escaped being eaten by convincing groups that he was a shaman. He also attributes his success to his extensive knowledge of guns, which makes him an asset to different Tupi groups (45). In Pereira dos Santos's black comedy adaptation, the protagonist is a Frenchman, Jean, who is cast out from a French colony in what is now Rio de Janeiro. After being captured by a Tupi tribe aligned with the Portuguese, Jean is captured by the French-allied Tupinambá. They do not recognize him as French and thus prepare him for a cannibalism ritual by giving him a wife and lavishing him with goods. Despite his attempts to trick a French trader into helping him escape, Jean is eaten in the end.

Jean backstabs the Frenchman, betrays his wife Seboipepe by stealing gold from her husband's grave, and attempts to leverage his knowledge of guns and gunpowder. His power grabs are starkly contrasted with the Tupi way of dealing with the enemy through ritual cannibalism, where the enemy is devoured in order to incorporate their strength. This colonial critique is further bolstered by the film's use of mixed media, juxtaposing the moving images with a series of stills which feature archival writings from various

clergymen, explorers, and politicians that were actively involved in colonizing what is now known as Brazil.

Aira's novel plays with Esteban Echeverría's 1837 epic poem "La cautiva [The Captive]" in which an Argentine soldier rescues a white woman from the grips of an indigenous group in the Pampa, the Argentine countryside. Aira's captive woman inhabits a world that the characters detachedly interpret through anthropological symbols and structures such as myth, endogamy/exogamy, and exchange. Ema is passed between Argentina forts and indigenous caciques until she ultimately maneuvers her way into launching an innovative pheasant breeding business. This happens in part thanks to a colonel's decision to begin printing vast amounts of money in an attempt to jumpstart a proto-capitalist financial system that will keep the caciques and forts trading and relying on each other without active raids or warfare. Aira's novel is as much a critique of the violent birth of the Argentine state as it is of the shift to finance capitalism in the 1970s under the repressive military dictatorship.

The film is considered central to *Tropicalism*, a popular music and art movement of the late 60s and early 70s that challenged the neo-imperialism and cultural conservatism of the military dictatorship. The film embraces (and subverts) tropes, mixes forms of media, and celebrates cannibalism, all major strategies of *Tropicalism* (Dunn 6).¹⁵ While *Ema, the Captive* was published in 1981, Daniel Link argues that the 70s

¹⁵ It isn't the only one: other Tropicalist films, such as *Macunaima*, heavily feature cannibalism as a nod to the 1920s. Also, Glauber Rocha's 1965 manifesto about Brazilian film, "An Esthetic of Hunger," doesn't directly refer to cannibalism, but his argument that revolutionary cinema grows out of a "politics of hunger" recalls the same idea. See Johnson and Stam 69-71.

were a “long decade” in Argentina, beginning in 1968 with the *Cordobazo*, a civil uprising in Córdoba that was violently repressed by police, and ending in 1983 with the election of Raúl Alfonsín after seven years of a repressive military dictatorship that saw the disappearance of 30,000 people (226).

Both films are central to studies of art during the Southern Cone dictatorships, as they present veiled critiques of their respective dictatorships through restaging older narratives of colonization and nation-state building. The 1971 film comes seven years after the start of the Brazilian military dictatorship, but only four after the 1968 passing of Institutional Act Number Five, which brought broad censorship of the arts, the outlawing of most political gatherings, and the suspension of habeas corpus for politically-motivated crimes, broadly defined. Despite the film’s critique of colonization and capitalism, not to mention its full-frontal nudity, the film was authorized to be made and shown in Brazil because it was seen as historical and pedagogical (Sadlier 58).

Through critiquing Euro-style “civilization,” *How Tasty* and *Ema* implicate not only the military dictatorships, but also broader dynamics of capitalism and colonization that come into play in the civilization narrative I outlined in the introduction to the dissertation. This has been widely agreed upon by critics.¹⁶ However, the place of energy-intensive technology in the film and novel isn’t central to political and aesthetic analyses of the two works, with the exception of Darlene Sadlier’s noting the importance of “technological expertise” (66) in the film and Niall Geraghty’s reading of *Ema*’s business

¹⁶ See Sadlier 58; Johnson and Stam 191; Nagib *Brazil On Screen* 71.

as industrial capitalism (*Polyphonic* 49). By centering anthropology, technology, and cannibalism, *Ema* and *How Tasty* present important challenges to the energy narrative of the “human” and what characterizes human growth and progress.

I place theories of how cannibalism works *energetically* (metabolizing the enemy’s strength) alongside those of technology. Whereas metabolic energy flows are usually understood in terms of cyclical systems, nourishment, and absorption of energy, technology in the civilization narrative is cast as *outside* and alien to the body, non-cyclical (extractive), product-oriented, and corrupting. However, *Ema* and *How Tasty* disentangle technology from this narrative, gesturing toward energetic possibilities that will get further explored in the following chapters.

Section I analyzes how the film and novel mobilize anthropology to critique the “civilizing” discourse of colonialization, as well as the very ethnocentric assumptions at work in anthropological definitions of the “human.” Section II closely reads Andrade’s manifesto alongside anthropological interpretations of cannibalism as a metabolic system. Section III explores how technology in the film and novel bring into relief Andrade’s own blindspots, offering us instead a different frame through which to think about technology and energy. The conclusion contextualizes this frame within the moment of the 1970s, which I read as a central pre-conversation to the ecological concerns explored in the later works I analyze in this dissertation.

Defining Humans

The promise of 20th century anthropology, James Clifford argues, is that ethnography and structural analysis would replace historical allegories with humanist ones, shifting the interpretive frame from one of Hegelian progress to one of “human similarities and cultural differences” (102). The stadial, ever-improving model that dominated the 19th century seems to give way to one outside degrees of perfection—the Other perhaps, “de-barbarized.” As we will see below, however, the later model ends up repeating many of the problems of the earlier. A paradigmatic example of anthropology can be found in Claude Lévi-Strauss’s memoir of his formation as an ethnographer and his studies in Brazil. *Tristes Tropiques* proved influential to Pereira dos Santos, the director of *How Tasty*. Lévi-Strauss even reflects upon the 16th century French presence in Rio, declaring “Quel film elle ferait! [What a film that would make!]” which Pereira dos Santos identifies as inspiration for making his film (Nagib, “Multimedia Identities” 163).¹⁷

Beyond Lévi-Strauss’s vivid descriptions of Amazonian groups with which he came into contact, the memoir dives deeply into the benefits and limitations of anthropology as a practice for coming to know cultural difference.¹⁸ Lévi-Strauss notes that the ethnographer uncomfortably straddles the line between simply being a “critic” of his native culture unable to fully understand the new one (such as Montaigne in “Of

¹⁷ For the original French, see *Tristes Tropiques*, Librairie Plon, 1995, 90.

¹⁸ For Lévi-Strauss’s elaboration on the position of an anthropologist, see: “The Making of an Anthropologist,” *Tristes Tropiques*, trans. John and Doreen Weightman, 51-61.

Cannibals”) or becoming a “conformist” in the field, falling in love with the new customs and unable to see them as objects of analysis (383). Occupying a middle position becomes most difficult when considering practices with contrasting moral implications, such as cannibalism, which Lévi-Strauss says, “inspires the greatest horror and disgust” (387).

Pereira dos Santos’s adoption of an ethnographic framework plays with the friction generated by this space of undecidability. He adopts aesthetically ethnographic techniques to suggest a more humanistic view of the Tupis, which sow the seeds for the film’s anti-colonial politics. Indeed, the anthropological angle of the film is one reason it was able to get approved by the military dictatorship: they considered the film an objective, educational look at a distant past, completely missing how the film’s critique of colonialism applied to them, too (Sadlier 71). The film uses Tupi, an extinct language, to give the audience the experience of linguistic alterity. The costumes and sets, too, strive for historical accuracy. Most of the film is cast in a naturalistic, “slice of life” light, following Jean and Seboipepe as they gather wood, hunt, canoe, and cook meals. The music also gestures to an ethnographic view: instead of something like a traditional orchestral score, we hear what sounds like Indigenous styles of flutes, hand percussion instruments, and chants. The camera is usually set at a distance, at times with items obstructing the view.

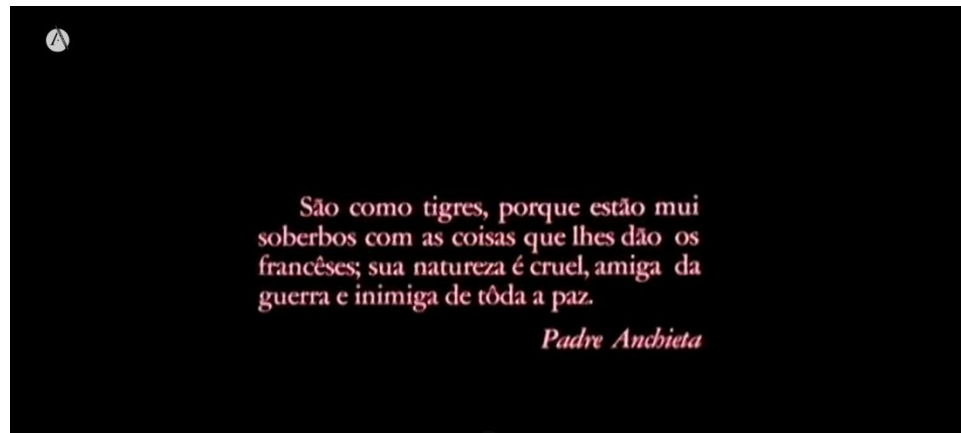


I Aggregador Media, Alexander Street (1971)

This kind of camerawork “naturalizes” what we see on screen, suggesting an observational mode of viewing. Richard Peña notes that “the long, uninterrupted handheld shots, quick zooms, and use of natural light are clearly reminiscent of the techniques of cinema vérité,” a style that strives for the feel of spontaneity and a somewhat ironic or playful realism (Johnson and Stam 191).

We get this ironic, playful sense in the opening sequence of *How Tasty*. A voiceover (the only one in the film) reads from a 1557 letter from Nicolas Durand de Villegaignon, the head of the French colony, to the Protestant leader John Calvin, narrating a scene of Europeans interacting with Tupis. The letter itself is historically accurate, but its delivery and introduction make it sound like a newsreel from the radio or played before a film screening. Lúcia Nagib suggests that the announcer’s booming declaration of the “Latest news from Terra Firme,” imitates the official newsreels the

dictatorship would employ to report on their achievements (*Brazil On Screen* 71).¹⁹ As the announcer goes on to recite the letter, describing “savages without any politesse or humanity,” we see onscreen indigenous women offering food to the Europeans and conversing with them in peace.²⁰



2 Aggregator Media, Alexander Street (1971)

While the mise-en-scène is coded as neutral observation of the Tupis, the written word is coded as biased. This comes mostly through title cards shown throughout the film that feature written fragments from Hans Staden himself, as well as clergymen, governors, and explorers. Some accounts paint the Tupis as non-human, such as Padre Anchieta: “They are like tigers...friends of war and enemies of all peace.”²¹ Other accounts underscore the Tupi soul and differing worldview, departing from a strict

¹⁹ “Últimas notícias da Terra Firme...” (my trans).

²⁰ “...Selvagens sem nenhuma cortesia nem humanidade” (my trans).

²¹ “São como tigres...amiga da guerra e inimiga de tôda a paz.”

animalization of Tupi people.²² However, none of the written accounts diverge from the general Eurocentric view we hear in the opening letter from Villegaignon.

At the same time, Pereira dos Santos's adoption of an ethnographic framework is not only there to challenge the written record. He plays somewhat with the friction generated by the observational mode, signaling how the ethnographic perspective is neither unmarked nor transparent. The final scene of the film, when Jean is eaten, zeros in on the limitations of an anthropological framework for understanding another culture. In the much-lauded shot, Jean's wife Seboipepe breaks the fourth wall and looks ambiguously into the camera as she takes a bite of Jean's flesh.



3 Aggregator Media, Alexander Street (1971)

While most read this act of recognition as another moment of colonial critique (we side with Seboipepe), I read the look as exploring the limits of an anthropological

²² For example: “Os selvagens acreditam que as almas daqueles que virtuosamente combateram seus inimigos se vão para os lugares de prazer [The savages believe that the souls of those that virtuously fight their enemies go to pleasurable places...]” (André Thevet, my trans).

frame of understanding. Seboipepe's gaze introduces a moment of reflexivity, as the *observed* becomes the *observer*. Further, I read her gaze as re-centering the very real, material aspects of cultural difference. Cannibalism is taken as metaphor in Andrade's manifesto, or as a symbol for something else (such as cultural difference) in Lévi-Strauss, Montaigne, and others. But Seboipepe's gaze asserts *her* perspective, world, interpretations, and material practices. Herein lies a core tension of anthropology, especially from the Lévi-Strauss era: what happens when other humans (other subjects) are studied as objects to be known? And worse yet, what happens when your ability to recognize humanity in the other is fully conditioned by your own culture's understandings of what is human?

Clifford argues that what anthropology introduces in the way of drawing parallels between disparate cultures ultimately makes the same mistakes as the 19th century discourse around civilization and barbarism, or even those of the *bonne sauvage* before that: exotic cultures are considered "closer" to the heart of some origin (humanity), less weighed down by history or the corrupting effects of modernity. The ethnographer extrapolates the origins of humanity from what is seen as a more basic culture, "society reduced to its simplest expression," (Clifford 112). By being human—and yet, closer to nature and the "transcendent truths" of humanity—studying the exotic Other holds the possibility to cure the ills of civilization, its corrupted side. This "corruption" of a purer prior state is based in the same civilization narrative that I outlined in the introduction to this dissertation. The following sections address this specifically in terms of technology, and what this tells us about energy stories in discussions of cannibalism.

. . .

Aira's novel is more directly suspicious of anthropology as a protocol for understanding "the human." In a telling scene, the narrator quips:

La humanidad es en todos los casos la clave del trato con los salvajes: negar lo humano, verificarlo, ampliarlo, transportarlo a un mundo que no le corresponde...Los antropólogos suelen perderse en un laberinto tan transparente...El tejido intrincado sólo reflejaba las titilaciones de la atmósfera (148).

[Humanity is always the key to interaction with savage peoples: negating, verifying, or expanding the human, transporting it to a world where it does not belong...Anthropologists tend to get lost in a transparent labyrinth...That intricate web reflected only the scintillations of the atmosphere] (Andrews 189).

As can be sensed in this excerpt, *Ema* drains anthropology of authority: there are only failed interpretations, allegories, and disenchantment. The narrator identifies "Humanity" as anything but a transparent category: it seems transparent—like an invisible spider web stretched across your pathway—but nevertheless applies friction when you try to cross its threshold. The concept of "humanity" either gifts or removes personhood from Indigenous people, a problem I explore at length in the following section. But this isn't the only dig at anthropology that Aira explores: the promise of exoticism and the hubris of structural interpretation, which allows one to identify the

“true meaning” of material practices, paint almost all of the interactions between Argentines and Indigenous people.

Ema excitedly attends an Indian ceremony hoping to see something primitive and shocking, but returns home bitterly disappointed, as she found the ceremony boring and flat. At the start of the novel, a Frenchman named Duval accompanies a group of prisoners and other soldiers as they march to a fort. Duval is scandalized when a soldier offers him one of the various imprisoned women to sleep with. The soldier shrugs him off, casually explaining that the women are like currency: “It’s a commonplace in ethnology: the much-discussed exchange of women. When you see it for yourself, you’ll realize how harmless it is: an innocent spectacle...” (Andrews 44). In another moment, a soldier tells the Frenchman Duval that “there were rumors of cannibalism, false of course, the sort that often circulate...indeed it might be said that no foundation is complete without such a myth” (Andrews 26).

Cannibalism into myth. This passage recalls Lévi-Strauss’s famous method of looking to myth to extrapolate a given culture’s beliefs, ethics, and system of organization. By establishing difference and opposition (this thing is not that thing), myths mark the passage from animal to human: through the channels of language and intelligent reasoning, the myths separate humans from nature. But Lévi-Strauss’s master key for unlocking a culture’s logics is itself based on an allegory, perhaps the most fundamental myth to Western thought and anthropology: the separation of nature and

culture. In other words, he relies on the assumption that humans were once a part of (but are no longer) an undifferentiated state of nature.

Lévi-Strauss writes in *Tristes Tropiques* that he had “gone to the ends of the earth to look for what Rousseau calls ‘the almost imperceptible stages of man’s beginnings,’” which are so difficult to track as to be almost speculative, a thought experiment of the moment nature ends, and society begins (316). Nevertheless, his understanding of myth resonates with Rousseau’s thought experiment in the *Discourse on the Origin of Inequality*, in which Rousseau theorizes that the establishment of private property was the beginning of civil society. In the Oxford University Press edition to the *Discourse*, Patrick Coleman theorizes the processes of differentiation that would have happened to then compel someone to enclose a piece of land:

“In [Rousseau’s] view, as soon as men become aware of, say, the flood-cycle of the Nile, *then they are no longer in the state of nature*. For in responding to any difference of circumstance, even in the most elementary way and for their own survival, they are already embarked on the historical process that leads to social inequality” (xix, my emphasis).

This aspect of Rousseau’s theory is huge, as it locates social inequality in *seeing difference* in a way that can be leveraged for gain. Noting the ebbs and flows of the river, and planning for that, suggests a level of cognition and awareness of temporality that exceeds those of animals (I suppose Rousseau wasn’t aware of seasonal bird migration?). Rousseau’s theory of differentiation resonates with other Western understandings of

humans as the only animals that are properly in time, able to distinguish their past, present, and future, and for that reason, able to plan and reflect upon their eventual death. This kind of temporal differentiation functions spatially as well, such as distinguishing between one plot of land as *mine* and not yours. Philosopher of technology Bernard Stiegler considers this kind of differentiation to be technical, as the human “exteriorizes” itself in material outside of the body (making the material *do* something for it, such as mark territory). He argues that “la technique est la condition de la culture en tant qu’elle permet la transmission [technics is the condition of culture in that it permits transmission]” across time and space (59, my trans). What is inherited in the body, then, is “natural,” what is inherited by scripture, artwork, and infrastructure is “cultural.”

Lévi-Strauss himself already made this connection, in so many words, in his famous “Writing Lesson” in *Tristes Tropiques*. He claims to have witnessed a Nambikwara chief in Brazil discovering the “true use” of writing for the first time. In Lévi-Strauss’s re-telling, the chief copies the anthropologist’s practice of jotting down notes by drawing meaningless squiggly lines on paper. The chief then claims that the lines have meaning; he is taking down which tribe members will get what gifts, stirring much interest, curiosity, and obedience from his people. Lévi-Strauss determines that the chief intuited that the true purpose of writing was to repress and dominate other people, much like Rousseau’s own argument about private property, or Stiegler’s (posterior) argument about technics:

“After eliminating all other criteria which have been put forward to distinguish

between barbarism and civilization, it is tempting to retain this one at least: there are people with, or without, writing; the former are able to store up their past achievements and to move with ever-increasing rapidity towards the goal...whereas the latter, being incapable of remembering the past beyond the narrow margin of individual memory, seem bound to remain imprisoned in a fluctuating history...” (298).²³

As I argued in the introduction to this dissertation, the narrative is quite familiar: the separation between nature and culture happens through technology, which is based on an energetic assumption. With greater controls of energy outside of the human body itself comes greater and greater stages of “humanity,” powering the progression toward civilization itself.

Cannibal Energetics

Oswald Andrade’s cannibal culture follows the same lines of thought:

“Filiação. O contato com o Brasil Caraíba. *Où Villegaignon print terre.*

Montaigne. O homem natural. Rousseau. Da Revolução Francesa ao Romantismo, à Revolução Bolchevista, à revolução Surrealista e ao bárbaro tecnizado de Keyserling. Caminhamos.

[Heritage. Contact with the Carib side of Brazil. *Où Villegaignon print terre.*

Montaigne. Natural man. Rousseau. From the French Revolution to Romanticism,

²³ For the original French, see p. 353 of the 2009 *Terre Humaine* edition.

to the Bolshevik Revolution, to the Surrealist Revolution and Keyserling's technicized barbarian. We push onward.]” (Andrade 36, Bary 39).

Lúcia Nagib notes that Andrade's anthropophagy is “a combination of primitivism and futurism,” marrying a utopic vision of the Indigenous with techno-optimism (*Brazil On Screen* 64). Andrade joins Rousseau's “natural man” with the “heritage” of Brazil (cannibalism), re-creating the primitivist impulse to place Indigenous groups as somehow “further” back in time (and therefore, more to the heart of humanity) than Europeans. But because the cannibalist practice is, itself, more fundamental to humanity's foundational core, the practice can resolve the tensions and disappointments that have arisen in moments of Western Progress. Indeed, Benedito Nunes argues that Andrade's revolutionary, progressivist vision is profoundly influenced by Marx (“A antropofagia” 21). In other words, Andrade imagines a way to take the good of the French Revolution or Communism without falling into European imperialism or Eurocentrism. Absolutely key to this vision is technology and industrialization, which Andrade associates with civilization.

We can see this especially in Andrade's reference to the “technicized barbarian,” a 1926 concept from German Hermann Keyserling who warned that “modern man” is in decline due to his unthinking relationship with machines, using them mechanically without knowing intellectually how they work (in other words, like a “barbarian” would) (132). The mark of progress for Keyserling isn't the assemblage of body and machine, but the ability to understand in an abstract or theoretical sense (12). Keyserling's work,

which made a small splash at the time (he even visited São Paulo, invited by the Brazilian modernists), epitomizes the civilization narrative that valorizes “non-sensuous,” rational thought over and above practices of the body (Bary, “Oswald de Andrade” 45).

Andrade’s cheeky uptake revalorizes this vision, imagining a synthesis between the body of the matriarchal savage together with the mind of the civilized man.

The question becomes: is Andrade’s vision of cannibalism politically or ethically viable, given its continued reliance on the civilization narrative that is fundamentally colonial in nature? The uptake of cannibalism in the 1970s in *Tropicalismo* seemed to think so. *How Tasty* was only one of several other works that saw in cannibalism a reliable anti-colonial metaphor.²⁴ Notably, there are some key points of friction between *How Tasty* and the “Cannibalist Manifesto” precisely in the area where the manifesto betrays its most problematic ethnocentrism, which Zita Nunes has powerfully shown to be anchored in ongoing legacies of white supremacy among creole (non-black presenting) elites in Brazil.²⁵

The point where *How Tasty* diverges (somewhat) from Andrade is in its treatment and interest in technology. And because the film takes cannibalism as more than a cultural metaphor, representing it literally and materially as a point of difference, I read technology’s subtle shift as an energetic argument. In other words, as *How Tasty* challenges the idea that technology is inherently “civilizational,” the film also gestures to

²⁴ See *Macunaíma* (1969) dir. Joaquim Pedro de Andrade; or Glauber Rocha’s manifesto “An Aesthetics of Hunger.”

²⁵ See Z. Nunes 25-58.

an alternative energetics that understands technology otherwise. To explore this point, it is necessary to take a look at interpretations of the Tupi practice in terms of energy, an aspect that is not quite present in Andrade's manifesto itself. How the film navigates this uptake, we will see, sheds light on an important historical and cultural moment of the 1970s.

The practice of Tupi anthropophagy was theorized in the 20th century as a strategy for dealing with alterity and power imbalances.²⁶ Benedito Nunes, a Brazilian cultural theorist, argues that ritualistically eating the enemy is reciprocal and an example of ongoing dialogic conflict between predator and prey ("A antropofagia" 12). It is about absorbing the enemy because they are worthy and worthwhile. By absorbing the enemy's strength, you metabolize the threat *for now*, but recognize that the eater will eventually be eaten. This exchange of power—of energy—looks a lot different than Manichean power relationships, which play out as domination by annihilation, extraction, or exploitation.

One reason why, Eduardo Viveiros de Castro suggests, is that the Western subject-object relationship does not operate in Amerindian thought. In practices of anthropophagy, eating the body of an enemy *is not* the same thing as eating an object; the body is "a sign with a purely positional value" (142). "In other words," he writes, "what was assimilated from the victim was the signs of his alterity," which allows for "reciprocal self-determination through the point of view of the enemy," (142). This is

²⁶ Viveiros de Castro notes that Florestan Fernandes, one of the founders of Brazilian sociology, applied Marcel Mauss's idea of the gift (reciprocal exchange) to his interpretations of 16th century accounts of cannibalism (141).

because self-consciousness is reached through viewing oneself *through* the other's perspective—a prospect that couldn't be further from the *cogito*, where the "I" is established through my own thinking.

Viveiros de Castro considers this "cannibal alterity" to be the "basal metabolism" of "perspectivism," his name for Amerindian ontological concepts that he learned of through extensive ethnographic fieldwork with Amazonian Indigenous groups (27). Perspectivism breaks with the concept of "humanity" in the European sense. Instead of humans as the only animals with culture, everything (animal, mineral, human) shares the same culture, but possesses a different nature. In other words, everything is a person, or has a soul, meaning everything has perspective, agency, and reason. However, the souls of nonhumans look very different than those of humans because they have different bodies (or natures). Peter Skafish explains that as opposed to identity or essence, difference and relationality are primary in "perspectivism" because a person (a soul) "only knows who and what it is on the basis of what its body looks like from the perspective of another soul" (Viveiros de Castro 13).

Perspectivism resonates with my call to think about the soul in terms of energy, as I suggested in the introduction to this dissertation. Every single thing (animal, human, mineral) can act or be acted upon (transferring energy) in different ways, depending on their bodily affordances. But the basic ability to operate energetically in the world (in other words, to have a soul) remains. By reframing subject/object relations, as well as the nature/culture divide, perspectivism radically redefines energetics in terms of

metabolism. A metabolics of power recognizes an ongoing cycling in and out of energy absorption, and understands alterity to be at the root of one's own expressions of power.

The energetic implications in Andrade's "Cannibalist Manifesto" are mixed, revealing an inherent tension between "becoming modern" and "becoming cannibal." Far from suggesting that Andrade's interest in science or technology is inherently problematic, I highlight this because of how it reveals a tension in energy narratives of development in the 20th century, even for those that are anti-imperial or anti-capitalist, as *Ema* and *How Tasty* are. Does cannibalizing technology and science from the West radically transform it, or does it remain ancillary to "civilization" as understood in the West? In other words, are the story of technological innovation and the story of "civilization" the same? Do they have to be? *Ema* and *How Tasty* both detect this problem and suggest that the answer is no. In the process, they sow the seeds for different kinds of energy narratives that respond to the climate crisis, the scope of which was only beginning to be known in the 1970s.

Technicized Barbarians?

I want to see how Andrade's call to cannibalize technology—to become "technicized barbarians"—bears out in the film's uptake of Brazilian modernist themes. In this section, I argue that the film actually pushes Andrade's thought further by *disentangling* technics from civilization, which Andrade himself did not do. By exploring technological desires within the frame of cannibal alterity, the film begins to gesture to energetic implications, but does not totally realize a vision of technology outside of a

civilizational frame. *Ema* takes this line of thinking one step further by positing technology as neither artifice, nor boundary between nature and culture, nor as inherently colonial in nature. That said, the novel leaves an open question as to what this alternate technics means for a societal vision that is less violent. To answer this question, I propose a synthesis between cannibal energetics and creative technology which will be fully explored in chapter 3 and the coda of this dissertation.

The film features its own version of the “beginnings of civilization” story in a sequence that borrows from Tupi-Guaraní mythology (Johnson and Stam 197). Upon request by Jean, Seboipepe begins to tell the story of “Mair,” a figure who brings civilization to the Tupis by teaching them agricultural methods and social structures. As Seboipepe tells the myth, Jean joins in reciting it with her. They both speak in voiceover as the sequence shows them acting out the contents of the myth: Jean portrays the Mair and teaches Seboipepe, standing in for her ancestors, how to light a fire and build a house. At the end of the story, the Tupis disavow him out of jealousy and burn the house down. Seboipepe explains that they now experience storms as retribution.

Because Jean steps in to visually represent the civilizing Mair, David Martin-Jones reads this sequence as a clear disavowal of “European civilization,” generally echoing most criticism we see of the film (7). However, the participation of Jean in the sequence suggests something more nuanced, and more relevant to my analysis of technology in the film. In the 16th century, Tupis made sense of European technology within their own cosmology. They referred to Europeans as “Maíra” (or Mair/Maire),

descendants of the “civilizer god” Mair (Shapiro 128). Some versions of the myth explain that Mair left the Tupis (and thus engendered the Europeans) because some people became angry with him and murdered him. Other versions of the Mair myth explain that Europeans are closer to the civilizer god because when given the choice, they chose the iron weapon over the wooden one, thus espousing different technological knowledge than the Tupis.

Alfred Métraux, a French ethnologist whom Lévi-Strauss credits with saving many of the myths he studies, recounts parts of this story. As recorded by the French missionary Claude d’Abbeville, it goes: “He found the iron sword too heavy and chose that of wood. At his refusal, your father, who was the most astute, chose that of wood. And since then we have been miserable” (20, my trans).²⁷ Thus, differences in technological know-how are explained *through* interactions with the Tupi-Guaraní god of civilization. There is no narrative of European superiority, but instead one of either broken emotional bonds (the Tupis killing the Mair) or different technological rationale (choosing the light material, which would be easier to carry and wield).

Back to the film, we can see how these elements of the Mair myth operate in Jean and Seboipepe’s re-telling. In the scene they function as doubles, signifying both the local, contextualized colonial relationship, as well as a broader, cosmological explanation for the origins of humanity. In both levels of the scene, Europe is de-centered. Jean (the

²⁷ “Il trouva l’espée de fer trop pesante et esleut (sic) celle de bois. A son refus le père dont vous estes sortis qui fut plus avisé, prit celle de fer. Et depuis nous fusmes misérables.”

stand-in for European influence) is rejected at the same time that he enacts the original gift of knowledge (as stand-in for the civilizer god). While the first level tracks with the broader anti-colonial flavor of the film, the second level points us to the film's implicit interest in the definition of the "human" as presented by anthropology. The inclusion of the non-European civilizational narrative asks us to take a closer look at the way technology functions in this discussion. Indeed, the film refuses to play into the *bonne sauvage* image of the Tupis, or as we will see below, to render them non-technical.

The point of the myths about the Mair aren't just to establish the origins of technology or knowledge, but to speak to more fundamental moments of differentiation: how humans became separated from other beings, the earth from the heavens, the land from the sea, the night from the day, and so on. In analyzing Tupi myths collected by André Thevet (a clergyman also featured in the film's title cards), Lévi-Strauss argues that twins are used across Amerindian "Genesis" myths such as this one is—to make sense of how difference and opposition arise from a shared origin (*The Story* 47-53). For example, the story of the Mair involves multiple generations of twin offspring that progressively mark separations of "creatures" from "creator," "Indians" from "Whites," "fellow citizens" from "enemies," and so on (*The Story* 51). This is another important way that "cannibal alterity" functions. Viveiros de Castro argues that twins signal an internal discord inherent to the Amerindian world; the real is never quite at one with itself, and yet, never quite separate either (180-181). The twins allegorize this truth, as they are both the same—copies of each other—and yet different entities.

In his productive reading of Lévi-Strauss, Viveiros de Castro concludes that twins in disequilibrium point us to “a break with the ‘exchangeist’ image of the socius” as found in Western understandings of how economies began (181). Unlike in Adam Smith’s theory of exchange value, this thing can never be exchanged fully for that thing—there is always a remainder. This remainder functions in transformations or new beginnings as well: the passage between nature and culture isn’t complete, or unidirectional, but a “labyrinth of twisting, ambiguous pathways...and even rivers that flow in both directions at once” (213). The remainder that Viveiros de Castro speaks of dialogues directly with Georges Bataille’s theories of energy expenditure.²⁸ This connection will become important in chapter 3, when I connect different forms of relationality to radical energetic expenditure. Just as Bataille argues that Western understandings of the social cannot properly deal with the remainder, Viveiros de Castro, too, argues that Amerindian myth makes better sense of this remainder.

Thus we have Viveiros de Castro’s ultimate deconstruction of Lévi-Strauss’s own understanding of myths as cosmological frameworks of the world that draw distinctions while recognizing that nothing is ever fully discrete. The doubling of Jean also speaks to this tension, as he represents both that which made Tupis survive (Mair introduced agriculture during a famine) and that which brought mass death to them (colonizers wielding weapons). It is not difficult to see how technology plays in both keys in the film,

²⁸ This resonance is not by accident; de Castro is heavily influenced by Marcel Mauss, who also influenced Bataille. And, as would be the case, Mauss and Bataille are influenced by the 16th century accounts of cannibalism.

as it is tied to intense power dynamics that could mean life or death. Just as the iron in the Tupi myth is heavier, and therefore more powerful, gunpowder and cannons feature prominently in the film as a way to understand colonial power dynamics.

In Staden's account, his possession of gunpowder and ability to teach the Tupis elevates him to the status of a god (89). This doesn't quite happen in the film, but still gunpowder and arms are central to the plot, as Pereira dos Santos has noted in an interview with Paulo Roberto Ramos (337). When Jean is first captured by the Tupiniquim tribe (allied with the Portuguese), he is recruited to help fight the Tupinambá because of his knowledge of guns (this reflects Hans Staden's account as well). When he is then captured by the Tupinambá, he also teaches them how to use a cannon, and later insists that he can get them gunpowder if they do not eat him. He is able to get gunpowder from the French trader, even after the trader insists that "Listen, no French captain, not even sir Villegagnon, will give gunpowder to these savages. It would be nonsense."²⁹

The scene of teaching the Tupinambá chief about the cannon is noteworthy, as it also breaks with the naturalistic editing of the film. In a series of quick cuts and tighter shots, Jean fires the cannon multiple times as the chief keeps yelling "more!" Quick cuts, tighter shots, and stark angles accentuate the excitement and energy of the scene. In some moments, the cannon also takes up a large part of the frame, emphasizing its allure. The

²⁹ Aucun capitaine français, ni même le sénior Villegagnon, livre la poudre aux ces barbares. Ça serait une folie.

chief proudly exclaims, “They will be my slaves, like you!” This scene seems to trace the same kind of corrupting arc found in the classic civilization narrative; the introduction of the cannon will only see the “moral ruin” of the group.



4 Aggregator Media, Alexander Street (1971)

However, the Tupi treatment of Jean functions differently than it would in the Hegelian lord-bondsman dialectic, where the lord does not see the bondsman as anything but an object to be used. Jean may be a slave, but he is also a fellow person, and devouring him is part of an intimate, reciprocal process of recognizing that. The film makes this point quite clear, practically spelling out for the audience (as an ethnographer would, perhaps) the symbolic meanings of the ritual. Before Jean is killed, Seboipepe explains the ritual’s reciprocity and coaches him to follow along: he should put up a respectable fight (because he is a worthy enemy) and verbally declare that his brothers will avenge his death, killing one Tupi in return. Jean does not follow this advice, instead understanding the ritual through his Western perspective. He declares, “After my death

my friends will come to avenge me. None of you will remain on the face of this earth!”³⁰

Instead of an eye for an eye, Jean’s declaration is more like the whole body for an eye: revenge, for him, means extermination, and victory means total domination.

The final title card, which closes the film, echoes this sentiment as well, and anchors this argument in historical facts. The Governor-General of Brazil, Mem de Sá, writes in 1557, “There in the sea I battled such that no Tupiniquim survived. Stiffly laid out along the beach, the dead took up close to a league.”³¹ Beyond drawing a clear parallel between Jean and Mem de Sá, the inscription suggests a connection between zero sum victory and calculative, quantitative logic. The dead are understood as mere measurements, their bodies nothing more than markers upon the sand that quantify the power of the Governor-General. This objectifying, quantifying logic resonates with Viveiros de Castro’s analysis of “exchangeist” social frameworks, which are not compatible with metabolic, cannibalistic energetics.

While contrasting these two different power dynamics, the film disentangles technology from the calculative, colonial side of the civilization narrative. But this argument only comes through in brief gestures, such as the Tupi interest in the cannon and the Tupi civilizational myth retold by Seboipepe and Jean. The film’s uptake of Andrade’s modernist cannibalism echoes a more general tendency in *Tropicalismo* to embrace scrappy, cheeky, and ironic perversions of the social norms espoused by the

³⁰ “Après ma morte viendrons mes amis pour me venger. Ils ne restera aucun des vôtres sur la terre!”

³¹ “Lá no mar pelejei, de maneira que nenhum tupiniquim ficou vivo. Estendidos ao longo da praia, rigidamente, os mortos ocuparam cerca de uma légua.”

dictatorship. But how this inversion speaks to questions of development, industrialization, and energy use is left up to extrapolation.

. . .

Ema, the Captive also features a meta-narrative of the beginnings of civilization: Espina, leader of the Pringles fort, hires the French engineer Duval to invent a complex money-printing machine in a bid to shift the power struggle between forts and caciques to one played out monetarily. The “[clima de dinero] monetary climate” that Espina introduces seems to kickstart a kind of civilizational pattern amongst the Indigenous (69). A sacred meeting ground transforms into “the desert’s most fashionable resort,” and indigenous people experience the loss of customs such as smoking (Andrew 112, 168). World History, it seems, begins: “Suddenly,” the narrator explains, “those remote and almost mythical Indians...entered the sphere of daily imaginings, since they were all linked (or so it was supposed) by the bills that were circulating out there” (Andrews 90). “Or so it was supposed...” is key here: Aira injects a bit of skepticism into the idea that circulating bills create a linked World, an all-encompassing narrative.

Soon we find out why: there is no “civilization” to introduce here; technology is already widely present in the area and circulation is already happening. We find this out once Ema is in the development stage of her enterprise, as she attends an indigenous pheasant breeding fair and hears buyers comment about her “white potentate, who, for his part, was new to the printing of money but full of imagination” (196). Indeed, Indigenous leaders at Ema’s pheasant breeding fair trade notes on “inks, papers, watermarks, plates,

and a thousand technical minutiae” (Andrews 191). This is not to mention the fact that Ema’s business uses “la técnica indígena [indigenous technics/technique]” (159, my trans).

That said, these indigenous money-printing innovators are not characterized as capitalists, as Espina is, but as artists. When it comes to printing money, the discussion revolves around aesthetic improvements within the system of money. Indeed, this artistic approach goes beyond the money-printing, as indigenous people are described throughout the novel as not “human” in the same sense as the Europeans or Argentines (read: in the anthropological sense). In conversing with Indigenous people, Ema discovers that “no eran artistas, sino el arte mismo...Eran dibujos inestables [they weren’t artists, but art itself...they were unstable drawings].” (130, my trans). The narrator describes the Indigenous characters: “La condición sobrehumana es la mirada teatral, o pictórica, la mirada que abarca todo y hace del todo su paraguas [The superhuman condition is the theatrical gaze, or pictorial, the gaze that encompasses everything and makes everything its umbrella]” (148, my trans).

This outlook exceeds the label “human,” and offers instead an aesthetic framework for thinking about the Indigenous characters of the novel. This surprising move does several things for the novel. First, it ironizes the way that the West has *fabricated*—through writing and drawings—an idea of what Indigenous peoples in the Americas are (the novel itself makes references to Darwin’s “crude” sketches of Indigenous people) (148). But Aira doesn’t, then, try to faithfully portray Indigenous

people or their perspective. He sidesteps a historical, anthropological, or romantic rendering of Indigenous people by making his project at once anachronistic and speculative. He keeps his critique firmly within the area of creation, fabrication, and play; instead of positing a more authentic reality than the colonial one, Aira is suspicious of the claim of having an authentic, privileged depiction of reality.

This also resonates with the way Aira's work has been read more broadly. Many scholars have read Aira's oeuvre as itself an experiment in constant creation and experimentation without a committed interest in saying anything too specific or placing stakes in the ground.³² This is largely due to his unusual writing process, which Aira himself has characterized as a "huida hacia adelante [flight/escape forward]" (Graedon). Aira famously doesn't go back to edit what he has written, instead "fleeing by running ahead," creating something new. His output certainly speaks to this: Aira has well over one hundred books published by a variety of publishing houses, usually putting out several novels a year. His novels lack precision (or, often, inner coherence), but abound with unexpected connections, outlandish plots, and ridiculous premises that flirt with breaking every writerly rule in the book. Jens Andermann argues that Aira's writing is creative in the sense of *creating*, imparting new types of sense; he isn't trying to represent the world in a mimetic sense, but *be* in the world as "un acto y no un objeto-texto [an act and not a text-object]" (*La Operación* 197, my trans).³³

³² See Sandra Contreras, *Las Vueltas de César Aira*; Francisco Carrillo "La Maquina de César Aira"; Graciela Speranza, *Fuera de Campo: literatura y arte argentinos después de Duchamp*.

³³ "Un acto y no de un texto-objeto..." my trans.

While the creative “flight forward” has been a key way to understand Aira’s larger project as artist, the concept also helps to make sense of how Aira transforms the civilization narrative into a narrative about energetics. This happens, largely, through descriptive treatments of technology that challenge its artificial and inorganic labels. We see this work first through Aira’s treatment of the engineer Duval, who has come to the Pampas to invent a great machine that will kickstart a new Historical age (or so it was supposed). For Duval, technology is not separate from nature, but an integral part of it. Duval dreams of building a machine that would breathe indefinitely and “felt that he had discovered the most primitive use of numbers, and thought that if he could keep count of those movements of subtle air, he would arrive at the number of the earth,” (Andrews 38).

The fusing of nature and technics in the novel has striking energetic implications. Normally technology is cast as alien to natural, cyclical processes. For example, for Martin Heidegger, technology turns nature into fuel (a standing reserve); for Herbert Marcuse, technology is alienating.³⁴ As I argued in the introduction, even when technology becomes “naturalized” as an instantiation of “survival of the fittest,” the energetic assumption is *still* that technology is a marker of the beginnings of culture, of the “Human” in the anthropological sense (separate from nature). Gilbert Simondon, a French philosopher from the mid-century, took great issue with these depictions of technology, as he found them to be overly anthropocentric and utilitarian. Why, he asked,

³⁴ For an in-depth discussion of differences between Simondon, Heidegger, and Marcuse on technology, see Susanna Lindberg, “Being with Technique,” pp. 299-310.

would we assume that technology is only *for us*, and, worse than that, for our own survival and productivity? This question has great import not only for nuancing both techno-optimism or pessimism (the engineer's paradise or the robot apocalypse), but also for trying to understand technology's role in the civilization narrative (and today's climate crisis).

Simondon redefines technology as a certain kind of relationship that arises in a web of things or an "associated milieu" (De Boever 207). The pencil, when not being employed by a hand to write, is simply a stick; the smart phone turned off, a paperweight. This shows us that technologies aren't instruments or objects, but a coming-together of things (some alive, some not) to make something happen. As I've argued in my introduction, this "something" that happens is the manipulation of an energy flow. What Simondon brings to the table is a theory about what this technological relationship can tell us about humans, as well as about reality more broadly. He considers technology to be an example of a broader tendency: Simondon understands nature as a "form-taking activity" which arises from a pre-individual state of thermodynamic metastability (in other words, a disparity between energetic fields) (Massumi 43). When a technological relationship arises (such as human and stick), this relationship expresses the energetic process of nature, which "resolves" thermodynamic metastability through becoming things in the world (taking form). Far from suggesting that human technicity points to domination or alienation, Simondon suggests that it signals ethical and political openings. In a chapter entitled "Technology and the Question of Non-Anthropology," Jean-Hugues Barthélémy calls Simondon's work a "difficult humanism," which,

“integrates human reality into *physis*, and on the other, technology into culture...technology is itself what expresses nature in its connection with the subject: the technical object is the extension of life through which that life can go beyond itself...” (49).

Muriel Combes argues that Simondon’s “difficult humanism” presents ethical, political imperatives. Instead of asking the Kantian question “What is Man?”, she suggests asking, “How much *potential* does a human have to go beyond itself?” (50, my emphasis). This is a technological question, in one sense, but it is also, more basically, an energetic one. This is Simondon’s point. We must ask: how much change can a life make; how many others can a life meaningfully touch; what newness can a life spring up in the world? For Simondon, living organisms cannot be explained simply as competing with each other and their environment to be the “fittest for survival.” Living organisms are instantiations of energetic reality, which is about potential, possibility, and constant creation. Interpreting reality in terms of competition, scarcity, and utility misses what viewing life in this way could afford ethically and politically. Technology is just one expression of this.

Aira gestures to a similar collapsing of technics and *physis* (physical reality or nature): Duval’s “work as an engineer was like springtime’s transformation of the world” (Andrews 55-6). Aira characterizes Duval’s technicity as following the same functions as what the end of winter does: new blooms, growth, and beauty spring up. At one level, Duval’s passion to design a perpetuum mobile or synthesize mathematics and nature

points to an energetic desire that is generative and expressive of the flows of reality. But at the level of politics, it remains unclear if Aira's techno-civilization narrative articulates an energetics that is radically different from the overall colonizing mission that Duval serves.

This tension seems to be by design, as Ema's narrative arc is designed to draw out uneasy connections (and points of friction) between technology, nature, and politics. Her excitement about the pheasant breeding business, not to mention the freedom it grants her, read as political gains, particularly in feminist and economic terms. But the business's technologies are troublesome, if not downright violent: male pheasants are drugged silly, and semen is removed from their testicles using a syringe; females, who cannot be drugged for the operation to work, are painfully penetrated by a syringe. All kinds of other drugs, feeding regimes, and caging contribute to the scene, which sees a synthesis between the artificial (the technical) and the organic (nature).

Beyond a localized, contemporary parody of industrial agriculture, Aira's scene also challenges the very separation of artifice and nature in the "beginning of civilization" narrative itself. While the pheasants are all currently caged, eventually Ema will set thousands free, with the goal of reaching forty thousand free-range pheasants. She explains to Espina:

"It's a critical number...A population of that size creates what the pheasant breeders call a 'stupid ecology.' Then there will be no need for the manipulations that you found so wicked. What you saw is just the prehistory of the breeding

program...With that number there will be a natural world of pheasants...By that stage my property will be an ecosystem, like the Indian breeding-grounds, which are sources of infinite wealth..." (Andrew 212).

In Aira's ironical inversion of the "beginning of civilization" narrative, the technological manipulations form a prehistory instead of the beginning of History, effectively decentering the Eurocentric vision of technology (and civilization) as the artificial supplement without recreating a romanticized, racialized vision of "untouched nature." Simondon understands technological "progress" in this sense, too: as a technological object becomes less and less specialized and more generalizable, it no longer is an artificial ornament, but a supporting element of the world. Ema's technological manipulations will come to create a new kind of natural (in which there are many more pheasants than before). Indeed, this line between natural and technological does not hold; the question becomes, instead, what elements shape the reality that makes up her meaningful world.

Niall Geraghty analyzes Ema's ultimate "liberation" as an example of Deleuze and Guattari's reading of capitalism as increasingly decoding flows that were once coded under other systems of hierarchy such as patriarchy or nation. In other words, Ema is set free from her status as "captive" and all that that label implies—feminine servitude, rape victim, and even her own whiteness—in order to enter the labor market and, ultimately, to become an owner of the means of production. While Ema and Duval's inventions work within and capitalize on the logics of capital, this analysis of flow doesn't fully capture

the role of technology. Indeed, capitalism's decoded flows happen not only because of a shifted social framework (such as patriarchy), but also because of a complex interplay between technology and environment. This interplay involves flows of capital, but also flows of energy. As Andreas Malm has so presciently suggested, the flow of capital cannot be understood without looking at one of its main supports: technology (34). Ema's liberation brings the connection fully into view, leaving us with the question: what is the relationship between technology and ethical creation? Or between energy and a liberatory politics?

Conclusion

While Aira's dark vision is a biting critique of the ways capital fabricates—and then dominates—"Nature," what it suggests about technology and energy remains less certain. The energetics of *How Tasty* remain much more straightforward, at least as far as politics is concerned. The cannibalism themes gesture toward a metabolic framework that can include within it technology, as the cannon does not destroy the basal metabolism of an ongoing, reciprocal negotiation of eating and being eaten. However, this vision remains but a gesture, perhaps limited by the film's own commitment to historical accuracy. We are left with an open question about where technology does (or doesn't) figure into a critique of the civilization narrative and the "human" it posits.

This matters more and more today, as the energy requirements of global capitalism and development soar to heights never before known. But I take the film and novel's first steps toward asking this question to be a reflection of their historical

moments. Looking closer at the *Ema* and *How Tasty* points us to important foundations that shape the discussions we are having today about the place of energy in responses to climate change. *How Tasty* does this work not only through technology, but also by drawing clear connections between coloniality and environmental destruction. As Jean chops down Brazilwood to sell to the Frenchman, a title card from Gabriel Soares de Souza, a Portuguese explorer, contextualizes this practice: “Every year the French used to take many thousands of quintals of Brazilwood; they carried it in many ships that brought it to France.”³⁵ Brazilwood was so excessively harvested that it is now endangered.

The 1970s are marked in both countries by brutally repressive military dictatorships that favored North American style economics. At the same time, this decade saw a shift in global capitalism from favoring production-based industrialization programs to monetarism and the rise of finance capitalism. This shift happened just as Latin America was catching up with the “First World” in terms of industrialization. The “Brazilian Miracle,” in particular, is an exemplar of this moment, with high economic growth through industrialization, particularly in infrastructure (highways, railroads) and energy (hydroelectric power plants, petrochemical factories). With the 1973 oil crisis, when members of OPEC declared an oil embargo and prices shot through the roof, lender countries raised their interest rates in order to remain solvent during the crisis. This

³⁵ “Costumavam os francêses resgatar cada ano muitos mil quintais de pau-brasil, aonde carregavam dele muitas naus que traziam para a França.”

plunged the region into debt crises: industrialization in Latin America no longer spelled the kind of growth and development that it had before.

The playing field changed completely: instead of import-substituting industrialization, the strategic move became a certain kind of “de-industrialization” known as “agro-industrialization” (Ortiz 601). Brazil and Argentina turned their attention back to primary products such as soy, oranges, and cattle, resulting (in Brazil’s case) in large deforestation of the Amazon. I highlight this history to signal that the 1970s was an important sea change for the perceived relationship between fossil fuel usage and growth. First, cheap energy fell apart, revealing yet again that the price of energy is not naturally produced, but created and manipulated by world powers. The Keynesian, liberal ideal of economic growth through traditional industrialization shattered, and re-imposed the (neocolonial) power dynamics between the countries in charge of finance and those producing mostly primary products.

Because of this background, I take the novel and film as beginning to implicitly detect what will only become so obvious later: the continued extractive relationship that relies on “cheap nature,” a framework that itself relies on the separation of “nature” from “culture.” The breakdown of this illusion was beginning in the 20th century, only to come crashing down as the climate crisis intensified in the 21st century. How these questions relate to on-the-ground approaches to technology, industrialization, and concepts of “innovation” or “advancement” still remains an open question. Can a technological approach solve what was, in many senses, a technological problem? *Ema* and *How Tasty*

presage responses to this question, redirecting our attention to the colonial uses of technology, which do not fully encapsulate its energetic dynamics. The following chapter addresses how more recent artworks take up this question and draw our attention to an important factor missing in so many discussions of how the cultural realm can address climate change: energy and how it relates to the “Self.”

CHAPTER 2: Masculine Energy at the Edge of Civilization

The year is 1790. An upper-crust Spanish lady sits in a poorly ventilated room in a remote colonial town of modern-day Paraguay, fanning herself restlessly and adjusting her suffocating wig. She is joined by Diego de Zama, an American-born functionary of the crown. They sip expensive liquor and fantasize about elegant Russian winters, the ballet, and other European delights that they miss out on by living at the edge of civilization. Luciana is showing off crystal glasses that were recently shipped from Europe:

They were wrapped in newspapers from Buenos Aires. And curiously, in this fleet, the newspapers that arrived were from an earlier date than the ones that were wrapped around my glasses. My little glasses brought news that was fresher than the papers that they distribute here. Isn't that charming? And sad? (my trans)³⁶

Lucrecia Martel's 2017 film *Zama* is about the gulf between colonial desire and colonial reality. This scene exemplifies the distortions that happen when European liberal ideology gets transposed to the periphery. Absurdities such as Luciana's inappropriate outfit or vanity orders wrapped in (actually useful) newspapers lay bare what Roberto

³⁶ "Estaban envueltas en impresos de Buenos Aires. Y curiosamente, en esa flota, los impresos que llegaron eran de fecha anterior a las hojas que envolvían mis copitas. Mis copitas traían noticias más frescas que los impresos que se repartieron acá. ¿No es encantador? ¿Y triste?"

Schwarz has termed “misplaced ideas.”³⁷ Stuff like wigs and fancy dinnerware is *supposed* to signal European values of erudition and cosmopolitanism, but only end up exposing outrageous contradictions. This is not to say that European liberal and enlightenment ideals are not also in contradiction with the economic relationships they conceal. However, in the new world colonies, the “misplaced ideas” are not even meant to *appear* as corresponding to reality—they are like ill-fitting wigs. This encapsulates a larger irony of the film: the colonial structure operates via its own failed promise. In other words, the “progress” of the developing metropolises comes directly through the violent, extractive, and forced dependence of the colonies which were never meant to develop in the same way.³⁸

What Luciana’s condescension (isn’t it charming?) masks is instead revealed by her disappointment (and sad?). Her desire for the current news suggests a concern that is different (albeit related) to the look of European culturedness. Schwarz, focusing on slavery in Brazil, argues that the “misplaced ideas” of democracy and liberty created all kinds of glaring contradictions in cultural representation, but course-correction came only once the *efficiency* of exploitation by capital was greater for a free laborer than for a

³⁷ See: Roberto Schwarz, *Misplaced Ideas: Essays on Brazilian Culture*, p. 26. While Schwarz’s analysis refers only to Brazil as it transitioned from a slave system under monarchic rule to a free laborer system under a republic, his ideas transfer well to other Southern Cone countries that saw similar elite cultural production that was out of step with the realities on the ground. *Zama*, of course, is set in a much earlier time, when Enlightenment ideals are only just beginning to filter into the scene, but the dialectic between European “elegance” and local atrocity still functions. Also, the original novel was written in 1956, when criticism of European influence on Argentina was already very much a part of the intellectual conversation.

³⁸ Andre Gunder Frank characterizes this irony as the “development of underdevelopment,” as imperial powers justify colonizing places that are more “primitive” by declaring that they will develop them. Of course, the colonial relationship itself disallows such a process, as the nature of colonization locks colonized places into increasing “underdevelopment,” or pronounced poverty for most, large primary export economies led by few wealthy landowners, and continued indebtedness to the colonial power.

slave. Luciana's desire for the news suggests a similar logic: the "breaking news" packaging only matters in that it reveals the *inefficiency* of the standard post. Her desire is not only for Europe *as aesthetic object* or ideal—she desires the world in reach by the cosmopolitan subject; she desires the speeds that operate at the center.

While Luciana's desire could be chalked up to bourgeois ideology of what is valuable and good (which is certainly a part of it), this chapter will focus on what this says about energy use and its relationship to the modern subject. This distinct focus signals how liberal, humanistic freedoms assume certain energy infrastructures and flows. In particular, there is an expectation and desire for easy travel over smooth, unmarked space; this ease of movement maps onto the masculine liberal subject who expects to succeed and be in control. This chapter analyzes two contemporary films that rework colonial energy narratives of ambitious, enterprising men who inscribe their will upon "empty" land at the edge of civilization.

These canonical narratives pair *active* masculine agency with *passive* smooth space, projecting the arc of manly self-improvement upon an imagined backdrop of no prior history, claims, or resistance. *Zama* and *Viajo porque preciso, volto porque te amo* [I Travel Because I Have to, I Return Because I Love You] revisit these narratives to challenge them, using formal techniques to highlight the textures and bumps in the landscape that their male protagonists miss as they try to take control and dominate. At the same time, the two films frame the men's desires as energetic and grounded in a

longing to live. With this, they gesture toward a reparative, recuperative mode of energy expenditure that will be fully explored in the following chapter.

Energy at the Edge

Lucrecia Martel's 2017 *Zama* is an adaptation of a 1956 novel of the same name by Antonio di Benedetto. The film follows a colonial bureaucrat in the late 18th century as he tries (and fails) to get promoted to a larger city. When that fails, Zama volunteers for a manhunt mission which ends in his betrayal of the troop due to his ill-conceived notions of loyalty to the crown. They cut off his hands in retaliation. The film concludes with his rescue by a young indigenous boy who asks Zama if he wants to live or die. Zama is unable to choose, signaling the ultimate tragedy of his disgraceful story: his incapacity to imagine or pursue growth *outside* of the colonial framework that failed him. Marcelo Gomes and Karim Aïnouz's 2009 *I Travel Because I Have to, I Return Because I Love You* follows the travels of a fictional heart-broken geologist out doing a survey in the Northeastern *sertão* of Brazil. His scientific and professional mission dissolves into a soul-searching road trip fueled by visits to prostitutes and poetic musings on the nature of love. The film ends with him regaining a sense of his own strength that is markedly different from the male energy narrative that dominates the film.

I Travel Because I Have to is a film composed of previously shot documentary footage, still photography, and new B roll footage shot for the purposes of the fiction film (G. da Silva 62). The footage was captured in 1999 by the directors for a documentary which didn't materialize, only to be transformed in 2004 into a short doc entitled *Sertão*

de acrílico azul piscina (T. de Luca 18). The directors ended up shooting far in excess of what they had planned, stating in interviews that they “lost themselves” in the landscape and started shooting “whatever moved them.”³⁹ They decided to craft a fiction film with the reams and reams of extra footage lying around, only needing to shoot a limited number of sequences to support the narrative they built around the pre-existing footage. In this sense, *I Travel Because I Have to* is not so much a re-writing of an old story as it is a remixing of old material. But this old material is hung on a structured narrative that is familiar, clichéd, and central to the energy narrative of Brazil: a man’s journey in the *sertão* allegorizes a larger story of development in Brazil.

The *sertão* is symbolically overdetermined, becoming a mythic space of agrarian rurality that is both romantic and bleak. For the first half of the twentieth century, from the text *Os sertões* (1902) to golden age films like *O cangaçeiro* (1953), the region is cast as both the wild heart of the nation and proof of its inevitable modernization. The scientific perspective of Euclides Da Cunha in *Os sertões* differs sharply from the male protagonism of the cowboy-like *cangaçeiros*, but both use strong male figures to synecdochize the internal struggle of the nation, aiming to modernize while keeping those elements that make the nation distinctly Brazilian.⁴⁰ *Cine Novo* in the 60s and 70s looked

³⁹ In an interview with Jean Claude Bernardet on his blog, quoted by Gonzatto da Silva but no longer available online, Marcelo Gomes says “Filmamos feiras, mas se existisse alguma coisa que nos emocionasse, a gente parava...Era um desejo de se perder naquele lugar... [We were filming street markets, but if there was anything that excited us, we stopped...there existed the desire to lose ourselves in that place...]” (Gonzatto da Silva 62).

⁴⁰ As explored in the introduction to this dissertation, the central figure of *Os sertões* is the mysterious and powerful Antônio Conselheiro, the messianic leader who led the civil rebellion against the central government.

to the *sertão* to reveal the contradictions of neocolonial capitalism and engender a revolutionary consciousness.

Some of the most central films of this moment still follow this same formula, representing the ills of the nation through male protagonists that struggle to succeed and gain strength.⁴¹ The post-dictatorship cinema of the *Retomada* largely paints the *sertão* in shades of nostalgia and sentimentality, a graveyard of Brazil's potentialities—untethered rurality, modernization, revolution, national cohesion, and beyond—which the *sertão* represented at various moments but now can only memorialize. And yet, the male narrative arc often remains: the little boy of *Central Station* (1998), for example, rediscovers his roots in the *sertão*, suggesting that he will now be able to grow up into a great man.

I Travel Because I Have to is a different kind of *sertão* film, instead forming part of a new cohort of Latin American rural films that simultaneously mark what Jens Andermann calls the “exhaustion of landscape” (as symbolic force) and the historical crisis that led to this very exhaustion (“Exhausted Landscapes” 51-2). Andermann argues that the landscape is emptied out of possibility in *I Travel Because I Have to*; it cannot signify anything, even “Nature”—that fantasy of a space still left untouched by humans and by history (69). Indeed, the very projection of what I term the “edge of civilization”

⁴¹ For example, Manuel and Antônio das Mortes in *Black God, White Devil* stand in for different revolutionary possibilities in the *sertão*; Macunaíma in *Macunaíma* ironically “resolves” racial and geographic disparity in Brazil; Fabiano in *Vidas secas* fails to take care of his family and is stuck in a never-ending cycle of poverty in the *sertão*, exposing the need for revolution in the area.

forms part of a colonialist framework in which there are always more abundant resources available to be tapped, more development to happen elsewhere, beyond the edge.

By addressing the tired overdetermination of the *sertão* through re-working past images and narrative clichés, Gomes and Aïnouz challenge the tacit energy narrative baked into the *sertão*-as-image. The circumstances that led to the film, too, speak volumes to the place of the *sertão* in the national energy narrative. The fiction film was funded in part by the national oil company Petrobrás (G. da Silva 64). The film also heavily references the Brazilian film, *Iracema, Uma Transa Amazônica* (1975), which critiques the building of the Trans-Amazonian Highway, a project that was meant to integrate the region with the rest of the country.⁴²

Martel's film is also not a strict re-writing of a classic energy narrative: Antonio di Benedetto's 1956 novel of the same name is itself a stark critique of colonialism and the ways it bears out in Zama's ambitions. However, Martel's adaptation to film sees an important aesthetic adjustment. Di Benedetto's novel is dense with descriptive, almost baroque prose, creating an overwrought pastiche of both modern and 16th century Spanish. Martel's film is low on dialogue, instead translating di Benedetto's estranging linguistic effects to formal elements proper to cinema: shot composition, sound design, sequence editing, and the contours of the frame all work to create a densely layered and difficult-to-penetrate image. While this change reflects Martel's mastery of her craft (and

⁴² See G. Furtado, "The Borders of Sense: Revisiting *Iracema, Uma Transa Amazônica* (1974)", p. 399.

lack of interest in subordinating film to literature), the shift is also suggestive for reading the film energetically.

When Antonio di Benedetto's novel came out in 1956, the plot's double bind of Zama's ambition and his limitations was read as an example of Latin American existentialism. The novel's themes of searching (and failing) to find one's purpose resonate with Jean-Paul Sartre's writings, and the threat of the void recalls not only *La Nausée* or *L'étranger*, but also *Waiting for Godot*—indeed, *Zama* is part of a series known informally as “La trilogía de la espera [The Trilogy of Waiting].” In a now much-quoted essay, celebrated Argentine writer Juan José Saer rejects the existentialist label that *Zama* received, arguing that existentialism is historically specific to issues coming out of World War Two. He warns that lumping a Latin American work in with existentialism is both ahistorical and Eurocentric (50). Saer reads the novel's themes of solitude and waiting as capturing the historical condition of the Americas without falling into the kinds of problems found in the normative historical novel genre, which tends to romanticize the past.

There is another problem I detect in categorizing *Zama* as an existentialist hero. Where Sartre's version of existentialism privileges human freedom through choices and affirmations, di Benedetto's novel—and Martel's film, following suit—grapple with the limits of freedom imposed by one's surroundings. Notable in the narrative is the lack of choices: protocols are tight, passive violence reigns, and soft power is exercised, mostly in the form of choosing not to hear/see someone or something. *Zama's* attempts to affirm

his own power couldn't be put in the individualist, choice-based terms that Sartre establishes. Instead, Zama's situation makes much more sense within a different phenomenologist frame: Zama is very much defined within a certain set of possibilities in his world, recalling Heidegger's understanding of existence as hemmed in and thoroughly historical. Where Sartre says that "Facticity is everywhere but inapprehensible; I never encounter anything except my responsibility," Zama seems to only (painfully) run into his own facticity—the concrete determinants of his life, such as his birthplace and context—without ever taking responsibility (196).

Thinking about *Zama* in terms of phenomenology makes even more sense when reading Martel's 2017 adaptation to film, particularly because of how the film's visual and sonic language address perception, texture, and the "thinginess" of Zama's world. In section III, I dive deeper into how Maurice Merleau-Ponty's work on texture illuminates how agency (and energy) work in the film. What interests me about *Zama* is precisely the heavy weight of context and content—the protagonist's physical surroundings, his limitations and assumptions, the colonial regime—which weigh down visions of a free-floating will that exerts its power in a vacuum. Indeed, it could even be that the versions of personal willpower from Sartre and those of *Zama* stem from similar narratives of upward mobility, individualism, and clear causality. What if the existentialist misreading of the novel signals a larger problem in how petromodernity and its precursors figure agency, freedom, and progress of the subject (and by extension, the nation)?

This is a possibility that I have already signaled in the introduction to this dissertation by situating David E. Nye's "male energy narratives" within the logics of petromodernity, but only in this chapter do I address this question directly in relation to issues of patriarchalism. While masculinity is in play in the rewritten civilization narratives I chart in the first chapter, challenges to this paradigm happen largely through negativity: Ema *may* be a strong female protagonist, but Aira leaves out the possibility of a directly feminist reading and keeps her character's psychology at arm's length; the same thing happens with *How Tasty*'s famous final shot of Seboipepe gazing into the camera, where her thoughts and her perspective are left up to the viewer to decipher.

In *Zama* and *I Travel Because I Have to*, however, the links between patriarchal masculinity and narratives of national development are made thoroughly explicit. Indeed, the protagonists' treatments of women are the main ways that the plot establishes their deep flaws and stuck points. Zama violently slaps women, makes pushy advances at Luciana (the woman with the crystal glasses), and has fathered an illegitimate child with a black woman, neither of whom he will claim. José is no better: he refers to women (mostly prostitutes) using very derogatory and objectifying language, steamrolls a prostitute that he interviews, and blames his errant behavior on his ex-wife for leaving him. Both men exert control on the world through their treatments of women and, as we will see in later sections, their operations with the state.

Because both films are so driven by character development, it makes sense to situate the role of misogyny within the larger storyline conflict of exerting power and

agency. As we will see, the characters' use of force against women *does not* bring them the kind of vitality they hope for. Just as the energy narratives of national development and colonization are failed promises, rotten to the core, so too are these characters' attempts to gain control via the twin mechanisms of patriarchy and colonization. That said, what I find most noteworthy about these films is how their critique of masculine energy narratives opens the way for a recuperation of energetic pursuits beyond the masculine and beyond the development of the nation.

Smoothness & Movement

Zama and *I Travel Because I Have to* are both dramas about stagnation of the self: at the heart of both character studies is the ensuing dread and depression that come from being lost or without purpose. Zama suffers because he wants a promotion to be in a larger city, where he can finally bring his wife and children to come stay with him. No matter what he tries to do, he remains stuck in the small town and socially isolated—he is rebuffed by not only the colonial officers and the king, but also by peers and love interests. José also suffers from a break-up and an ensuing depression, which he combats through his road trip. For both of them, the cure to their woes is to move: across the *sertão*, or, in the case of Zama, to a bigger cosmopolitan city (and when that fails, to the Pampa, where he hunts down a bandit).

Michel Callon and John Law suggest that agency and subjectivity are experienced in terms of movement, because “Passion, emotion, to be affected, all have to do with travel.... To be moved, to be transported, the trip, these are metaphors for displacement”

(10). Their desire for movement is an energy desire, a desire for a self in control, a self that *moves* instead of only *being moved*. José explains that he took this job to drive across the *sertão* and survey precisely to “fazer me mover...voltar caminhar, voltar viver [make myself move...to return to walking, to return to living].” Zama is only moved by others, caught up in a world of bureaucratic power plays and social niceties that cast him about. Try as he might to exert influence upon his situation, he fails again and again. An aphorism that opens the film characterizes Zama’s conundrum:

There’s a fish that spends its life swimming to and fro. Fighting water that seeks to cast it upon land. Because the water rejects it. The water doesn’t want it. These long-suffering fish, so attached to the element that repels them, devote all their energies to remaining in place. You’ll never find them in the central part of the river, but always near the banks.⁴³

For Zama, the “water” is this world of Spanish functionaries and elites who establish colonial cities and parrot European fine living in the Americas. Zama is entropic, representing at the level of narrative the second law of thermodynamics: he may “devote all his energies” to staying in place, but his story tends towards chaos and disorder at every turn, ultimately ending in the final state of stasis—death.

⁴³ Hay un pez que pasa la vida en ‘vaivén,’ luchando para que el agua no lo eche afuera. Porque el agua lo rechaza, el agua no le quiere. Estos sufridos peces están apegados al elemento que les repele. Emplean todos sus energías en la conquista de la permanencia. Nunca les va a encontrar en la parte central del río, sino en las orillas.

Graeme Macdonald frames “causality, impetus, and productivity in plot and character development” in energetic terms, as “fiction relies on momentum and transference” in a traditional narrative arc (532-533). Because of these parallels, he argues, literary fiction implicitly relies on the fictions that circulate around energy. These have been, since the coal age, “the social fiction of unhindered and waste-free energy flow,” a fiction of surplus and strength, or what Stacey Alaimo calls “carbon masculinity” (Macdonald 541). This fiction maps onto important precursors—energy narratives of civilization and the human that pre-date the beginnings of the Anthropocene. *Zama* and *I Travel Because I Have to* link energy narratives of progress and the masculine individual to those of the nation. This can be seen most succinctly by the functions both characters complete for their respective governments: Zama is a functionary to the Spanish crown whose life is shaped by cross-Atlantic communication, José a scientist surveying for a national energy project—the construction of a canal for hydroelectric dams. This canal will—José comments off-handedly—flood many small towns and displace poor people across the *sertão*. Their personal success is tied to state success, to the state expanding its influence to what it sees as smooth space, *terra nullius*, the edge of civilization.

As explored in the previous chapter, inscriptive technologies are energopolitical. Heidi Scott argues that literary arcs of “triumph and tragedy, love and indifference, selfishness and altruism” may arise in many different contexts, but *how* those arcs play out gets shaped by “the physical nature of specific fuel environments” (14). In other words, the automobile and road system in *I Travel Because I Have to* draw “the

landscape of possibility for the characters acting within its horizons” (17). José’s large truck, hurtling across the *sertão*, multiplies possibilities of movement through space. Thus, José’s desires for the self (masculine, in charge, and all-knowing) have the opportunity to get expressed through the increased speed and magnitude afforded by energy-dense fossil fuels. His movement through the space is not only shaped by the automobile, however: his array of scientific instruments, which he lists off exhaustively at the start of the film, do this work as well.

The multiplied possibilities all shape an experience of self that is all-powerful, with dastardly consequences. Scott argues that “Oil ontology gives each individual consumer the illusion of being superhuman” (10). In a final scene, José reflects on his trip in exactly these terms: “A gente pensa que é superhomen...*que pode tudo*...até o dia que você leva um pé na bunda. [People think that they are superman...*that they can do everything*...until the day they get broken up with]” (emphasis mine). José’s use of “Poder,” meaning both “to be able to” and “power” in English, is key: it echoes Merleau-Ponty’s definition of *pouvoir* (to be able to and power in French), which he uses to define our experiences of consciousness. Instead of “I think,” he holds, a subject’s existence in the world is determined by what “I can do” or *je peux* (139). Thus, sense of self—sense of agency over one’s environment, sense of vitality—is a function of *pouvoir*, of what you are able to do.⁴⁴ While Merleau-Ponty makes clear that a subject’s *pouvoir*, their

⁴⁴ I first came across this connection through Dominic Boyer’s use of Merleau-Ponty and *pouvoir* in his definition of “energopower” (political power as magnitude and force), which I outline in the introduction to this dissertation.

sense of freedom, “is always an encounter between the exterior and the interior,” in constant dialogue with the world, José and Zama see only themselves (481-2). Their self-centered approach to the world is only further supported by their interactions with their surroundings as blank, as smooth space to be written upon.

José’s survey project is an example of what Jens Andermann has called the “optic of the state” (*The Optic* 5). He renders land and people visible or invisible based upon the needs of the project. In one moment, José photographs a peasant family that will soon be displaced by the water canal project and micromanages how they should pose for the camera; his documentation isn’t of what is there, but what the state *wants* to be there. Further, the protagonist’s perspective quite literally takes over the film: his voiceover narrates the images, giving context to what we see. José himself is never shown in the film, recalling the authoritative male “voice of god” commentaries in traditional documentary or what Donna Haraway calls “the god trick,” the nonlocalized, all-knowing mode that voices of “expert knowledge” take on (“Situated Knowledges” 581).

Written communication in *Zama* functions much like José’s survey project—Zama’s illusions of self are contextualized within technologies such as writing and cross-Atlantic communication, which bolster colonization.⁴⁵ Zama exercises his power through paperwork: letters to the King, reports, written declarations under oath. He purveys the Law of the Letter, or what Ángel Rama refers to as “el mundo de los signos [the world of

⁴⁵ In analyzing the Iberian expansion in the Americas, John Law argues that long distance control would not be possible without the steady flow of communication made possible by the vessels, people, and types of documents in use at the time.

signs]” in the “ciudad letrada [lettered city]” (11). Of course, Zama himself cannot write: he dictates his reports to his secretary; this painful irony illuminates Zama’s core conflict—his complete absorption and belief in a world in which he cannot fully participate.

Texture

Formal and aesthetic techniques challenge the self-centered perspectives of the protagonists. These moments poke holes in the masculine energy narrative that undergirds their senses of self. I argue that the films do this by highlighting textures in the image that break with the smooth, the linear, or the all-encompassing. Differing film grains, occlusions in the frame, discontinuous editing, and sound-image incongruence contest the overwhelming perspectives of Zama and José, pointing to accretive histories, other modes of being, and points of resistance. It is from the meeting of these two strategies—the energy narratives of the protagonists and the textures that slow them down—that the films present a reparative, recuperative response, which I will turn to in the final section.

I return here to Merleau-Ponty’s version of *pouvoir* to draw out how his broader phenomenological framework elucidates how texture could challenge the egos of the protagonists and sow the seeds for a different kind of energy narrative. Merleau-Ponty warns against understanding agency and freedom in binary terms of “non-doing and doing” (479). In such a perspective, causality and responsibility would be fully attributable (or not attributable) to a subject. This would only work by rendering the

world “a perfect transparency, that is, by destroying the ‘worldliness’ of the world” (479). For Merleau-Ponty, there is no smoothness or blankness in this sense, no transparency or total absence. “Smoothness is not a sum of similar pressures,” he writes, “but rather the manner in which a surface...modulates the movement of our hand” (329). The material qualities of the film form do this work in the films, challenging the colonizing conception of *terra nullius* and protruding into the protagonists’ worlds.

Martel’s immersive experience of discontinuity rips openings in the fabric of colonial logic and the discourse of the self that Roberto Echevarría cites as the start of the modern novel in Latin America.⁴⁶ The cut comes to suggest a broader experience of reality in the colonial setting, where “continuity” is established (i.e.: authority is extended into space and time) precisely through the cutting out or deletion of what is already there. The film’s grammar is that of the lacuna, the ellipsis, and the non-sequitur. Even as the overarching narrative remains linear, depicting Zama’s slow—and then rapid—decline, crucial and trivial plot points alike are cut out or cut away from. Dialogues will feature lines that do not relate to the logical flow of the conversation, or will feature repeated lines needlessly, as if to underscore their superfluity or failure to properly communicate.

⁴⁶ Echevarría argues in *Myth and Archive* that writing was central to colonization of the Americas and that the Spanish legal discourse came to shape how the picaresque novel framed the self in terms of legitimization in written form.



5 The Match Factory (2017)

Martel's unusual and careful use of the frame (a technique that has already been much-noted in her previous films) creates a thoughtful tableau out of every scene. The constricting frames tease at what escapes the purview of the characters' worlds. By making very explicit the limits of the frame, Martel translates the limitations of the characters' worlds. More specifically, she is interested in communicating the willful blindness and deletions that make the colonial structure operate. Heads of characters are cut off, or they meaningfully glance to something just before the edge of the frame.



6 The Match Factory (2017)

In many scenes, African slaves and Indigenous people are foregrounded, and yet, remain out of focus. In the scene above, for example, we can see Zama framed in the center with an Indigenous woman's body in the extreme foreground (on the right), her head cut off. In a scene towards the end of the film, once Zama has been captured by an indigenous group, the camera films the opening and closing of a door. Only in flashes when the door opens do we see snippets of the ritual being performed against Zama and his troop. Through these cuts, Martel places emphasis on the subjects and practices that get willfully ignored by Zama and his other powerful bureaucrats.

What happens at the level of the single frame also occurs in moving shots or through staging, making the deletion painfully apparent as the camera reveals images in direct contradiction to what the characters are saying. In one scene, for example, Zama is

visited by a non-elite creole family. They have come to complain about having to fight Indians off their land and ask for Zama to gift them forty “indios mansos [tame Indians]” because they have none that will labor for them anymore. As an example of their suffering, they point to their granddaughter who is also in the room, and recount how she was brutally captured by a cacique. They mention that she is mestiza but do not elaborate. As they speak about her, the camera pans to her and focuses on her expressionless, hardened face, which neither confirms nor denies the tale of heroism they tell.

In addition to the frame and the truncated dialogues, the soundscape of the film creates an uncanny, disjunctive feeling, a narrative made of what Natalia Brizuela has called “psychic time.”⁴⁷ Zama is not at home in his world, or even in his own mind. Extradiegetic murmuring crowds into scenes, becoming gradually louder and louder until the dialogue in the scene is inaudible. These moments are not so much a clear glimpse into Zama’s inner state—the murmurs are often not even in his own voice—as a sonic remainder of Zama’s disassociation or loss of control. A long, chilling sound punctuates scenes when Zama is experiencing intense disappointment, confusion, or despair. This subtly unnerving sound, known as the Shepard Tone, is an auditory illusion that creates the feeling of constant tension that never actually resolves, musically registering a sense of bottomlessness or directionlessness. Far from operating as an orchestral soundtrack meant to support the foregrounded action, the Shepard Tone always cuts into the scene

⁴⁷ Natalia Brizuela’s comments come from a talk I attended on the film at the Lightbox Film Center in Philadelphia in April 2019.

and obscures the dialogue and other noises. The music redirects attention away from the diegesis.

In an opening scene of the film, a trader arrives with his son. The little boy's interaction with Zama holds a couple of key examples of dissociative sound, as well as subtle cuts that poke holes in the linear flow of the scene. The boy is hoisted onto a chair being carried on the back of a slave. Zama looks up at the boy, who turns his head as if to address someone else and whispers a monologue about Zama:

A god that has been born ancient, that cannot die. His solitude is terrible. The doctor Don Diego de Zama. The energetic one. The one in charge. The one who pacifies Indians. The one who performs justice without using his sword...⁴⁸

As the boy talks and turns his head back to stare Zama down, the Shepard Tone resounds. Sometimes, the camera cuts to his face, mouth unmoving despite his monologue continuing. Zama's face fills with terror as he looks at the boy, who then pulls out Zama's sword—did he grab it from him in a prior moment that was cut out? This is left unexplained. Then, there is another jump cut: now, the boy's father is the one hoisted up on the chair. The Shepard Tone and the disjunctive editing ratchet up what is already an unsettling scene, meant to communicate Zama's discomfort. The little boy calls Zama “el enérgico [the energetic one]” as he effusively enumerates all of his achievements, clearly

⁴⁸ “Un dios que ha nacido anciano, que no puede morir. Su soledad es atroz. El doctor Don Diego de Zama. El enérgico. El ejecutivo. El pacificador de indios. El que hizo justicia sin emplear la espada...” (my trans).

mocking him. Similar to the fish monologue, the energetic claim here is clear: Zama is all tapped out; he is not in control, he is not strong.

Martel uses the cinema's own tools for creating continuity (editing, sound) to ultimately craft a discontinuous film experience. These insights extend to broader cultural questions, laying bare what the "law of the letter" (as Rama refers to the colonial order) misses about life in Argentina. In other words, the colonial order's experience of continuity (linear, written logics, and unquestioned chains of command) only work through violent deletion. The edge of civilization is only so through mass deletion. At the level of the psyche, the film explores the sensorial disjuncture of a limited worldview, or a perspective steeped in power (or its unilinear, and yet failed, pursuit).

...

I Travel Because I Have to pairs José's free-wheeling, over-dominating, all-consuming voiceover with a rich, textured collage of images. This experimental mixture is a direct result of the conditions through which the images were captured. The filmmakers use the old documentary footage to craft a fictional narrative by making the protagonist invisible, transforming their own visual travel diary into his. This move creates a feeling of multi-layered "pastness," as super 8 mixes with 16mm, still photography (some black and white), and DV tape. This nostalgic visual texture pairs well with a dense network of past cultural references, producing a film that is as much about history and the past as it is about José's struggles with loss.

Scholars have widely noted this, characterizing the film as a meditation on the history of Brazilian cinema and politics. Tiago de Luca puts the film in terms of strata, seeing it as an excavation at the level of cultural memory and technological change, while Lúcia Nagib reads the film as a bridge point between the revolutionary force of cine novo and the cinema (and politics) of today (*World Cinema* 54). Jens Andermann considers *I Travel Because I Have to* to call on the rural landscape as iconic and revolutionary while simultaneously exploring the exhaustion of this possibility after the 20th century (“Exhausted Landscapes” 51). The *sertão* in post-dictatorship cinema of the 90s and early 2000s no longer holds this revolutionary charge, instead shifting to being the nostalgic or recuperative backdrop for a personal journey. Samuel Paiva has noted this, casting José as the inverse of the masculine, virile, and political heroes of the cine novo *sertão*, following the general movement to the “personal” and “depoliticized” in the more contemporary return to the *sertão* (Luca 31).⁴⁹

While all of these readings cast the historical register of multi-layered collage as a question about political action (whither Brazilian leftist politics?) I consider the film’s texture to point to another, albeit related, problem—deep time. If Hayden White argues in *Metahistory* that history follows narrative protocols such as argument and emplotment, time at the geological scale would trouble history told as such, through cause and effect, characters, and their actions. Geological time, brought up by José when discussing his

⁴⁹ Paiva’s analysis comes in the form of a talk and an unpublished paper, both of which are quoted at length in Tiago de Luca’s treatment of the film.

survey, offers the possibility of re-reading the layered film images as explorations of sedimentation, accretion, and scales of change and action beyond-the-human.

Jeffrey Jerome Cohen writes, “To think like a mountain requires a leap from ephemeral stabilities, from the diminutive boundedness of merely human tales” (3). José’s narration is mostly self-centered, mooning about his lost love and complaining about his trip. But when he speaks about the rockface, we see him (briefly) think like a mountain. In one moment, he speaks about the intense tectonic activity 580 million years ago, which has resulted in an active fault line that will jeopardize the canal infrastructure project. He points out the folded, veiny texture of the rockface as evidence of plasticity during the rock’s initial formation. The infrastructure project—massive on the scale of the human—is momentarily dwarfed, as the rock’s own active history inserts itself into the story, complicating human hubris.

The accompanying image is a photograph showing a flat rockface that takes up the entire frame. We only see texture—the veiny pattern, the marbled contrast of light and dark—without a sense of scale or context in terms of size or duration. The rockface refuses placement in a narrative—it is hard to imagine these veins being formed so many millions of years ago, when the rock was not solid, but plastic. The moment doesn’t last for long: a series of jumpy images break the stillness, showing José placing a pencil down “for scale.”



7 Rec Produtores Associados (2009)

By inserting the pencil, José attempts to rescue the scene from deep time and bring it back to the parameters of the human—the pencil, the hand, and measurement humans can understand. His sober recognition of human limits comes crashing down; he insists that despite the issues of the fault line, it will still be the perfect region to cut through.

This moment recalls Gilles Deleuze’s observation that in cinema, there are moments of slippage between narration and description that bring the actual (what can be narrated, like the infrastructure project) into contact with the virtual (all past moments which coexist in layers and planes) (*Cinema 2* 46). These moments, he argues, reveal how time is not simply moved through, as if on a line, but is the culmination and ongoing “gnawing forth” of what Henri Bergson calls *duration*, a “continual progress of the past which gnaws into the future and which swells as it advances” (4). For both Deleuze and

Bergson, time isn't moved through, but is piling up constantly, bulging forth, and sticking with us. José's perspective, operating at the scale of the human and its agential speeds, tries to smooth out all of this striation and accretion, bringing unimaginably large timespans into human-sized and human-shaped horizons of development.

At the same time, this passage from deep time to human time (history) is not complete nor left untouched. José himself is affected by the landscape, stating multiple times that he is beginning to dry up and slow down like the desert he is studying. In these moments, when José is often at his most emotionally vulnerable, the shots shown are shakier, overexposed by sunlight, or oversaturated from old super 8 film, suggesting a textured richness (and inability to film it) that goes beyond José's own body and camera. We see José's attempts to reject the undecidability between his (human) agency and the immensity of the landscape, but it permeates him.



8 Rec Produtores Associados (2009)

Another way texture impresses upon José is through moments when the filmmakers allow aspects of the found footage to shape the narrative of the film. We can already see this, for example, in the title of the film, which comes from footage of a painted mural on the side of a service station somewhere along the route. José sees the painted phrase, “Viajo porque preciso, volto porque te amo [I travel because I have to, I return because I love you]” accompanied by two figures in love and he takes note of it. From there, the phrase becomes part of the main discourse of the film. José repeats it throughout, at first as a sign of his undying love for his ex-wife, and then later as a bitter piece of proof that the love is forever lost. This signals how the film project, despite being a work of fiction, is shaped meaningfully by what was captured on the ethnographic trip ten years prior.



9 Rec Produtores Associados (2009)

Two prolonged, ethnographic treatments of the sex worker Paty and a shoe repairman named Seu Severino resist—and perhaps begin to change—José’s perspective. These moments of the film truly go to the outermost limit of the film’s own proposal, as the previously filmed interviews and observational scenes refuse to fit into the representational or narrative frameworks of the film. When we first meet Paty, the camera remains in observational or spectacular mode as José narrates about the day they spent together. As is often the case, José’s narration shapes the image: he talks about an encounter with her that we never see or have any evidence of. But José’s imposition doesn’t remain unmarked for long. After an interview with Paty where José forces the direction of the conversation, we get an observational long take of Paty dancing with a friend to a *forró* and the narrator (for once) falls completely silent, just watching. Jens

Andermann calls this moment a “documentary window [which] opens up inside the diegesis” (“Exhausted Landscapes” 62).

A similar thing happens in a long take of the shoemaker Seu Severino singing the classic “Ultimo Desejo” with a force that overtakes the scene. While I agree with Andermann that the lack of voiceover signals an important moment of agency for these two subjects, I find what comes after these scenes to be particularly noteworthy. Just after, the narrator seems to fall into a moment of deep desperation, as the images on-screen appear blurry and out of focus, accompanied by a tense soundtrack. The narrator begins to repeat at a whisper, in an almost sing-song way, something Paty had said in the interview: “Eu quero ter uma vida-lazer [I want a life of leisure].” This same thing happens again after the scene with Seu Severino, with José repeating the lyrics that Seu Severino had sung about a failed relationship.

In both instances, José absorbs and repeats the discourse of subjects that otherwise do not get folded into his perspective or narrative. In the case of Paty, when she turns to talking about love and life, she is in control of the conversation (as opposed to prior moments when he asks her about her workplace). She articulates a vision of reciprocity (I’ll give leisure to those that give it to me) and *relaxation* that differ sharply from José’s attempts to regain his own willpower and his resentful, one-sided remarks to his ex-wife. Her slow, sensual dance with her friend also nods to this kind of energy exchange. In the case of Seu Severino, the inverse is true: the song seems to signal similar themes to José’s own relationship. Despite this, the song of lost love by Seu

Severino differs sharply from the repeated words of José. Seu Severino's performance is rich and powerful, full of emotion and strength. The energy of José's rendition is entirely distinct: the melodic melancholia twists into a bitter, resentful spoken-word poem, highlighting José's inability to healthily form (or grieve) relationships.

Further, just as José overlays his interpretation onto the family he photographs, failing to see them as they represent themselves, he forces his water canal project onto unyielding land. In another moment, José insists that a small city, the first to be flooded by the canal, is a "ghost town" even as we see a man walking through the shot. José's commentary (and survey project) render invisible certain people and places in the process of planning the spectacular, ultra-visible water canal project. The presence of the man reveals José's blindspots—not to him (he doesn't acknowledge the man), but to the viewer. In this way, the film layers voiceover and image into a palimpsestic document of the *sertão*, on the one hand shaped by José and his survey, but on the other, materially resistant to it.

Conclusion

While the films use texture to challenge the energy narratives of their male protagonists, the final scenes gesture to other possible energy narratives. These gestures recuperate the protagonists' desires for strength and growth but place them outside of the masculine energy narrative at the edge of civilization. *Zama* ends with the manhunt group violently cutting off Zama's hands after he betrays them. The final scene opens on a shot from above of Zama sleeping—or perhaps dead—in a canoe, his two blackened stumps

wrapped in reeds. The position of the shot suggests a sense of finality, either from the perspective of God or from someone at a wake, peering down at a motionless body. All around Zama and the canoe are rich, lush algae that float and sway in a graceful motion, exploding with vibrant hues of green. Zama and the canoe, in contrast, are in grey tones, subtle and deadened.



10 The Match Factory (2017)

We then learn from whose perspective we are viewing: the camera cuts to a young Indigenous boy crouched over Zama's body, gazing down worriedly at him. He asks, "¿Quieres vivir? [Do you want to live?]" Zama opens his eyes but is unable to answer. The end of the film, then, is not Zama's death, but his total loss of agency to decide, his loss of desire. We have reached the ultimate point of Zama's entropy. The algae, moving languidly atop the water, starkly contrast with the stagnant Zama. Indeed, with the clever use of a steady cam, the boat remains perfectly still in the scene—we can surmise its

movement only from the parting algae, which seem to gracefully bow out of the canoe's way.

I read this ending as shifting the focus from the individual human to other symbiotic and non-individualized forms of life. This shift concludes an argument that the film has been building: Zama's individual desires for strength and movement are not universal markers for success, survival, or life itself. In fact, his unidirectional and linear pursuit of lettered culture and progress has brought him to the point where he cannot even choose life. His ending feels quietly tragic or morbid, but the vibrant, lush green that fills the frame suggests another takeaway, a reparative possibility.

Algae is not a single species, but the name for a large and diverse group of organisms that do not share common ancestors. Because algae convert sunlight into biomass through photosynthesis, they are considered "primary producers of life" and yield about half of the oxygen in the Earth's atmosphere (Schrader 77). Algal biofuels could be a replacement for fossil fuels because they can produce energy-rich oils. Donna Haraway cites algae and lichen (a symbiotic partnership between a fungus and an alga) as examples of sympoietic (producing collectively) as opposed to autopoietic (self-producing) systems, making them better models for understanding how relationships, interactions, and life operate (*Staying With* 33). Scott Gilbert, Jan Sapp, and Alfred Tauber state that "We are all lichens," arguing that studying biology in terms of individual species and discrete bodies gives an unclear and biased picture based on

Western ideologies of independent citizens, subject/object dichotomies, and human exceptionalism (325).

There is no human without, for example, gut bacteria, meaning that development is a matter of “interspecies communication” (328). Michelle Murphy argues that STS and Environmental Humanities scholarship have both found that “the stories of unformed objects tend to be heterogeneous, open-ended, and a challenge to convey in linear writing.”⁵⁰ The kind of agency that Zama believed himself to have is an illusion that bears out aesthetically through the cut, opacity, and sonic confusion. His own linear story gets undone. But Martel doesn’t just leave us with the cut: beyond Zama’s frame—here, a canoe, a symbol of human technicity and exceptionalism—other forms of life and complexity bloom.

For all the talk of rock and land, *I Travel Because I Have to* also concludes on the water, with José reflecting on how his journey has fundamentally changed him. It is in this scene that José acknowledges his limits to his own power (*poder*), stating that he realizes he is not a superman. This sequence also features the most subjective camerawork of the film, signaling a recognition of José’s point of view *as* point of view (as opposed to unmarked and all-encompassing, as it is for most of the film). As he is speaking, the shot moves up steep sets of stairs until it reaches the top of a monument and looks out. The camera bobs as we hear José breath heavily between his lines, suggesting that he is holding the camera. Just after this moment, we exit José’s embodied perspective

⁵⁰ See: <https://culanth.org/fieldsights/studying-unformed-objects-deviation>

entirely as the shot changes to found footage of men diving off cliffs in Acapulco. José also notes the change in the subjunctive mode, characterizing his “return to life” as if he *were* diving in Acapulco (*como se estivesse*).



11 Rec Produtores Associados (2009)

What to make of the ending of this film? Most critics either brush past it, chalking it up to a tropic, predictable resolution of one man’s depressive issues, or they characterize the turn to water at the end as a reference to the phrase “o *sertão* will become sea, and sea will become *sertão*,” a refrain from the *Cine Novo* film *Black God, White Devil*. The famous final scene features a shot of the protagonist running across the land that dissolves into an image of the sea, signaling a revolutionary, utopic shift for the oppressed peoples of Brazil. What happens if we join those two readings, considering the cultural reference at once with the narrative arc? José’s own journey, then, gets

contextualized in terms of past cultural moments, making the dive into the water not simply a narrative of personal willpower realized.

Returning to Deleuze's denominations, the heroic, happy ending for "the self"—the protagonist—comes through an image that is both actual and virtual. The divers are actual—they narrate a movement of body through space, symbolizing José's being set free to live—at the same time that they are virtual—signaling many different pasts, all layered and co-existing in planes. These pasts are many. They are mineral and they are historical: the past of *cine novo* and revolutionary imagery, the past of the rockface forming however many billions of years ago, the past of organisms emerging from the sea, only to return again in a triumphant and athletic display. The shift from the *subjective* camera at the end to the *subjunctive*, imaginative mode punctuates this. And yet, the resolution of José's story, and the political possibilities it signals, can be felt.

But what kind of a resolution is it, exactly? Where the politics in *Black God*, *White Devil* were firmly placed in revolutionary, sometimes utopic, visions of taking power, the dive into the sea here is articulated altogether differently. The politics of the scene do not suggest something revolutionary in the 20th century sense, nor something personal in the (neo)liberal one, but what Bruno Latour calls "compositionist," which would recognize that "things have to be put together (Latin *componere*) while retaining their heterogeneity" ("An Attempt" 474). In other words, a politics that could respond to our ecological disaster would need to recognize the multitude of agencies (not just human

agency) and the proliferation of alliances between things, people, ideas, and so on that make up reality.

José's sense of self and his survey project crystallize the larger modern misrecognition of "passive" Nature out there, ready to be written on. The action of diving speaks to this idea as well. Instead of taking over, dominating, or flattening, there is a letting go, a release. The dive is powerful movement through space—an experience of personal change—that comes in collaboration with the force of gravity, the height of the rockface, and the depth of the water. There is no single actor here, but a composition of forces acting on one another, a radical porosity and being-with, or what Donna Haraway terms a mutual vulnerability or "staying with the trouble" (*Staying With* 12). Such a composition still centers energy transfers, but with an expanded perspective to all the forces at work. José doesn't just move the truck, for example, but *is moved* by it, as the carbonized life forces of yore still exert energy. He may work toward building the canal, but the fault lines will almost certainly work at cross purposes with him, having their own say.

Will José's final transformation, the weakening of his ego, mean less violence? What is left unclear in *I Travel Because I Have to* is foreclosed in *Zama*, at least as far as the protagonist-as-actor is concerned. Reading these two films together reveals a problem that remains in how humans assign meaning to energy use. Is it possible to tell a story of change for the better *outside* of the usual assumptions in the tale of masculine domination

(taking charge), extractive development, or building civilization? Is growth or strength desirable? And if it is, where do we draw the line—growth and strength for whom?

Both films consider the utopic possibilities of shifting the story to one of porosity, vulnerability, distributed agency, and collective and accretive making/doing. Growth and life both remain as energy desires, thus making the narrative arc of personal success still a compelling means to approach the story of ongoing life on earth in all its complex compositions. But this narrative gets modulated to other forms, opening the space for a new relationship between energy and meaning that could point to a narrative fit for today, in a damaged world marked by climate change. The energy transfers in the bright green algae are so unthinkable they could nearly be sublime. The water, too, challenges our categories. As Lao Tzu, the guiding figure in Daoism, suggests: water is soft but terribly strong.

CHAPTER 3: Radical Energetics in Paradise

In the previous chapter, *Zama* and *I Travel Because I Have To, I Return Because I Love You*, end by displacing an individual, masculinist quest for growth and discovery onto the elements of water and earth. The turns to ocean and algae suggest that a post-human frame may be able to supply an alternate, less destructive energy paradigm, one that is not based on individual mastery of the “empty” wide open, the edge of civilization. Gabriela Cabezón Cámara’s 2017 re-writing of another civilizational tale, the 19th century poem *Martín Fierro*, fully explores what is left as only speculative gesture at the end of these two films. Through penning the untold story of Martín Fierro’s nameless wife, Cabezón Cámara’s *The Adventures of China Iron* imagines what the shift from one kind of energy paradigm to another could look like. The outcome is paradise, in the classical sense of the term: it is a lush, idyllic garden of delights, closed off from the rest of the world. The narrative changes over the course of the novel, tracking a dialectical transformation from what David E. Nye calls a heroic, male energy narrative to what I term a feminist, radical energy narrative.

Martín Fierro is a foundational text of the “cultural mythology” of the emergent nation-state of Argentina in the 19th and early 20th centuries (Montaldo 14). Following Jean-Luc Nancy and Claude Lévi-Strauss, I define “myth” as that which names “the intimate being of a community” through the articulation of opposites, such as good and evil (Nancy 48). In the case of Argentina, a central binary pair is that of the city and the *campo* (countryside), which Domingo F. Sarmiento specifies in terms of civilization and

barbarism. *Martín Fierro*, a two-part poem by José Hernández published in 1872 and 1879, tells the story of the gaucho Martín Fierro, a poor migratory cattle worker who is conscripted to fight and work in a labor camp. Upon escape, he becomes a hardened, criminal outlaw and goes to live with Indigenous groups. Martín Fierro is redeemed when he rescues a white woman and returns to Argentine society. Like many national myths, the soul of the protagonist stands in for the soul of the nation, with his arc of triumph presaging the young nation's destiny: progress.

While the poem was a smashing success when it was published in 1872 and 1879, it did not transform into the canonical monument that it is known for today until decades later, in the early 20th century. The re-interpretation and institutionalization of *Martín Fierro* spawned what Brendan Lancot calls the “gesto ritual [ritual gesture]” for the Argentine writer finding their voice: re-write or interpret the national myth, in order to carve out their own place in the history of Argentine Literature (353, my trans). Like the Oedipal mandate to kill the Father in Harold Bloom's *The Anxiety of Influence*, Argentine writers of the 20th and 21st century have been answering the call for years.⁵¹ While there are many adaptations that celebrate and elevate the original (or the way it was interpreted decades later), versions from the intellectual left tend to question the assumptions about civilization and barbarism that *Martín Fierro* has come to be known for.

⁵¹ In *The Anxiety of Influence: A Theory of Poetry* (1973), Harold Bloom uses the Freudian concept of metaphorically killing the Father as an important stage in development to theorize that poets must contend with their literary forefathers if they are to succeed, as opposed to being drowned in their influence.

I argue in this chapter that Cabezón Cámara does something different in her response. Her version follows the story of Martín Fierro's unnamed "china," the word for wife used by gauchos, after Fierro abandons her and their children. The wife joins an Irish woman, Liz, as she sets off in the Pampa to find her husband and the land they were promised by the British government. Liz names her "China Iron" (a play on *fierro*, which is Spanish for iron) and proceeds to teach China science, geography, and languages. Liz and China have an intense erotic affair and end up forming a new communal society with Indigenous people. In her travels, China crosses paths with Martín Fierro, who is genderqueer and in a relationship with a man. He apologizes for abandoning her. Liz and China even meet José Hernández, a fictional version of the author of *Martín Fierro*, who is a brash, violent leader of the very fort in which Martín Fierro had been conscripted (and from which he escaped). Many critics have hailed this novel as its translators have, a "playful pastiche, queering Argentina's national myth of the noble virile gaucho" (*Adventures* 192). Besides Liz and China's affair, the novel features gender-bending, polyamory, and multispecies encounters, what Paula Fleisner calls a fable of "matria" (playing on the Spanish "*patria*"), turning the patriarchal "fatherland" into a queer and feminist paradise (4).

Fleisner and Laura Fandiño read this feminist re-telling in post-human (non-anthropocentric) terms, identifying horizontal perspectives and affective language. My study adds to these readings by framing these concerns specifically in terms of energy. I argued in the introduction to this project that scholars in the Energy Humanities have framed the shift in attention from the *doer* (the individual, the subject) to the *doing* (the

action) in Affect Studies and New Materialism as fundamentally a question about energy use. In *The Adventures of China Iron*, I see a fruitful opportunity to consider how literary representation grapples with the connection between matter and vitality in terms of energy. I start this work by beginning precisely from whence most reviews of the novel jump off: the tenets of civilization, which the novel clearly troubles, though not in as clear terms as one might think.

While Cabezón Cámara's novel is an explicitly feminist re-telling of *Martín Fierro*, my focus will be primarily on the energetic, technological, and material aspects of this re-telling. I take these strategies to be themselves feminist in approach, as their point is to change the implicit masculinist, extractive energy narrative in interpretations of the poem as national landmark. While it is clear that the novel is critical of the national myth of progress towards civilization, certain epiphenomena like science, technology, and knowledge of the world remain ambiguous. I argue in this chapter that this is precisely because the "civilization versus barbarism" discourse is not only ideological but also material. Cabezón Cámara's novel frames the civilization narrative in terms of energy and, in the process, foregrounds energetic questions as *at the heart* of an anti-colonial, ecological, and nonviolent social response. This energetic focus, paired with the speculative, utopic ending, point to an example of what I call radical energy narratives. These narratives understand energy not in terms of productivity, competition, survival of the fittest, or maximization, but instead in terms of vital use: this means growing to grow (not to dominate or compete), moving, creating, and being in relation to others.

Section I of this chapter dives into the novel's complicated critique of the "civilization versus barbarism" discourse. I argue that the novel's concern is less with the contents of the original poem itself than with its early 20th century capture, when it became institutionalized as the heart and soul of a civilizing Argentina. While Cabezón Cámara's novel rejects this nationalist interpretation (and the politics behind it), a certain conflicted desire and interest in the glimmers of "civilization" remain. Following the novel's descriptive language and narrative arc, I identify why: Cabezón Cámara attends to the story of *Martín Fierro* in Argentine Literature as reflective of a larger energy narrative of modernization. The novel leads us to ask the question: how to depict a narrative of growth and discovery that isn't a narrative of extraction?

Section II addresses not the why of the novel, but the how. Through close readings of certain passages, I identify an ontological and aesthetic shift in the novel from subjects/objects to a horizontal, relational, and ecological category of being. Section III explores how an aesthetics of belonging speaks to energetic concerns. I argue that the novel's shift to a horizontal model introduces a radical energy narrative.

Martín and China's Energy Narratives

Re-writing the *Fierro*, particularly in the latter-half of the 20th century up to today, usually has more to do with the poem's canonization and interpretation—its process of becoming the "national book"—than with the contents of the poem itself. J. L. Borges complains in his critique of the poem that all of the pomp and circumstance around the poem's canonization as a classic has made reading it no longer an act of

pleasure, but “el cumplimiento de una obligación pedagógica [compliance with a pedagogical obligation]” (9, my trans). The poem continues to be discussed, re-interpreted, and adapted with fervor because it has become a symbol for the cozy relationship between “Argentine Literature” as an institution and the process of nation-building. Commenting on *Martín Fierro* is like commenting on “Literature” or national culture itself. This is precisely due to the way in which the poem was canonized, decades after its initial publication, by members of the political party that the original writer opposed. Canonizing *Martín Fierro* and crafting a national culture were both grounded in the discourse of civilization.

The leading interpretation argues that the early 20th century interpretation (and institutionalization) of *Martín Fierro* turns popular art (that of the masses) into tradition, ossifying it as already-past and neutralizing its subversive elements. My reading adds that the canonization of *Martín Fierro* is itself an energy narrative, rehearsing the assumptions about progress, modernization, and the place of the “human” that have contributed to the climate crisis today. Like other contemporary re-writings of the poem, Cabezón Cámara questions this civilizational progress narrative and the role the Gaucho plays in nation-state formation. But what she adds is an ambivalence about civilization that I read as energetic, as she explores the desires ignited and the possibilities afforded by *certain* epiphenomena of the “growth of civilization”—namely, science, technology, and the increasing interconnectivity of the world.

...

Martín Fierro was written by a Federalist (the political party Sarmiento associates with barbarism) who was critical of elite central control in Buenos Aires. Given this fact, the poem wouldn't seem to be a strong candidate for the origin of Argentine literature or the symbol of its civilization. When the two installments of the poem were first published, in 1872 and 1879, they were both smashing successes in terms of sales, but the intellectual (and political) elite in Buenos Aires did not regard the poem as important or worthy (Almirón 102). This had a lot to do with Fernández's political affiliation, which wasn't in the mainstream of the Buenos Aires elite, as well as a more general elitism and racism that valued European-style work over art that came from or was inspired by the rural interior. The *Gauchesque* genre was popular, but it wasn't considered worthy of serious intellectual attention. This changed several decades later, when a new crop of elites became invested in defining Argentine nationalism in a way that included the "barbaric" elements, or the rural interior.

Most notable are the series of lectures given by Leopoldo Lugones in 1913, which drew large crowds in Buenos Aires, including President Roque Sáenz Peña (Montaldo 66). Lugones' re-evaluation of the poem as *actually* the essence of a civilizing Argentina made waves: Pablo Martínez Gramuglia notes that the poem became part of the curriculum for literature (*letras*) at the University of Buenos Aires in 1913 and entered the primary and secondary schools in the 1930s, when the Argentine government actively worked to canonize the poem as a national symbol. Statues were erected, streets named for the author and character, and the "Día de la Tradición [Day of Tradition]" was established as a national holiday on November 10th, the birthdate of the author José

Hernández (72). Another liberal, Federalist president, Bartolomé Mitre, was also a big fan of the poem, seeing it as a symbol of the nation (Borges 86).

Why did the elites go from seeing this poem as an example of crass Gaucho style, devoid of any intellectual rigor, to casting it as the heart and soul of Argentina? The first reason, as Borges suggests, comes from a much older religious idea that one people has one book, which got transferred in the 18th and 19th centuries to the idea of a national book (89). I add to this the late 19th, early 20th century fascination with evolutionary theory, which makes its way into social and cultural analysis. Using crude philological methods, Lugones draws parallels between Homeric verse and the *payada* (the traditional ten-line verse used in *Fierro*). From these close readings, he extrapolates that the Gaucho is the Argentine equivalent of a precursor to modernity. The Gaucho transforms from being, in Sarmiento's late 19th century moment, a barbarian, to instead being the great civilizer of the Pampas: his poetry and his rugged dominance over nature differentiate him from the indigenous "savage" and provides proof that the Argentine soul has advanced to the civilized level associated with the arts.

Ricardo Rojas, another critic from this moment, picks up on Lugones' arguments and adds that *Fierro* is the nation's "epic" because it depicts the fundamental conflict inherent in the evolution of man, "la lucha del protagonista con su medio [the protagonist's struggle against his environs]" (891, my trans). Rojas identifies the "medio" as the Pampa, which he considers to be several centuries behind that of Buenos Aires in terms of civilizational development. The harshness of the plains, the "tierra virgen [virgin

land],” must be brought under control and the Gaucho—closer evolutionarily to the “primitive” Indian than the city dweller—is tough enough to do it (899, my trans). The drama of establishing the civilized nation relies on the familiar story of differentiating the human species from its environment, which also signals a certain loss. Recuperating the Gaucho means also recuperating a certain kind of oneness with the land—one that is hardy, masculine, but (crucially) no longer threatening to the urban elite who want a centralized government.

This kind of understanding of civilizational progress wasn’t new to the political conversation in Argentina: David Haberly makes a compelling case that Sarmiento himself was greatly influenced by the Scottish Enlightenment and its theories of developmental stages from savage to barbaric to civilized. However, until the early 20th century, *Martín Fierro* was not taken up in this way, nor was it recognized as significant beyond its popularity. Lugones and Rojas, among other critics, make a move that crystallizes a core aspect of the energy narrative at work: depictions of rurality prove the natural progression of humans away from the state of nature. Falling away from nature explains (and “justifies”) nature’s being rendered nothing more than what Heidegger calls a “standing-reserve,” or passive resources ready to be tapped (*The Question* 17). These thinkers get there not by outright rejecting the “barbaric,” but by folding it in to the progress narrative as a necessary steppingstone. The nostalgia for a more organic past, or for the rugged individual out in nature, is secured as a safe desire because it is rendered as already-past, as impossible to retrieve, much like the introduction of technology marking

a split of man from nature. This was also a common feature of Sarmiento's own depiction of the Gaucho.

Civilization and the discourse of a nation hurtling toward progress are at the forefront of Cabezón Cámara's re-writing of the poem, reflecting this history and her critical view of it. This comes through the characters' own adoption of the discourse in blatantly direct language. In the beginning of the novel, when China and Liz are traveling through the open Pampa on their way to a Fort where they will claim Liz's land rights, the land is described in tones reminiscent of Sarmiento's in *Facundo*. The Pampa's natural state is stillness, it is vast and flat, while Liz characterizes Britain as the forefront of progress. Liz depicts the *Gaucha malo* as a lazy outlaw; the Gauchos are referred to as "a sickening dung heap of Indians and white men" and as "savages" (35). Later in the novel, the fictional version of Hernández echoes this language when he shares his vision for bringing progress to the Pampas. Indeed, Hernández is the main villain of the novel, and his civilizing discourse goes hand-in-hand with his cruel treatment of the Gauchos, his egregious come-ons to Liz, and his violent views of society.

Also, while Liz and China are visiting his fort, China makes the crushing discovery that Hernández stole her husband Martín's *payadas* and made a fortune by publishing them under his name. The irony that Hernández, the "great civilizer" of the Pampas within the novel, became wealthy off the stolen words of a (barbaric) Gaucho satirizes the structural relationships that helped to produce the original poem itself. The *Gauchesque* genre, J. L. Borges argues, should *not* be conflated with the *payadas*, an oral

tradition that inspired *Martín Fierro* as well as other works (15). The genre was born of elites that wanted to depict the authenticity of the Pampa and its customs for reasons of nostalgia and cultural soul-searching.

Graciela Montaldo calls the genre itself a “double cultural strategy” that locates the soul of the nation in the rural while, at the same time, conspiring to tame and control the rural for the benefit of the capital, Buenos Aires (14, my trans). Josefina Ludmer defines it as a combination of opposites, where the voice of the masses is transcribed by the *letrados* (lettered people), neutralizing the Gaucho into a figure palatable for the elites. She considers this generic move “a treatise on modernization” in Latin America: the constant negotiation between the city and the countryside, “lo culto y lo popular [the refined and the popular]” (78-9, my trans). Cabezón Cámara fabricating a plot of thievery allegorizes this more general cultural process.

...

That said, Cabezón Cámara’s novel is still invested, in some ways, in the narrative arc that defines the subject of the masculine energy narrative treated in chapter two. The narrative arc follows China’s process of liberation, which has a complicated relationship with “civilization” and energy. Cabezón Cámara’s descriptive language suggests such a link, particularly through language around brightness, light, and burning. The “spark” that begins China’s adventure comes from seeing the “brillo [radiance]” of a scrappy, abandoned dog. She is entranced with his energy, as he hops around and barks. She decides to seek that radiance for herself (11). Light, in the sense of brilliance or

brightness, is defined in the Oxford English Dictionary as “That natural agent or influence...emanating from the sun, bodies intensely heated or burning, and various other sources...”. Wanting to shine can be taken entirely metaphorically—China wants to be important, to be distinguished—but taking it at face value, as an energy claim, offers quite a bit of mileage. China wants to burn fuel; she wants to use her body and the tools around her to do more than simply exist. She wants vitality, like the jumping dog; she wants to make connections and discover the world.

In the beginning of the novel, this happens through education and exposure to cosmopolitan ideas by Liz. This process is understood in terms of *expansion*, a word and concept that is central to both colonial logic and China’s own personal growth: “Everything we were experiencing was new to us; ideas, sensations and even our taste buds were *expanding* under the British Empire” (22, my emphasis). China herself describes the process as “going from the raw to the cooked,” an allusion to Claude Lévi-Strauss’s own shorthand for differentiating between the world of nature (the raw) and the world of civilization or culture (the cooked) (18). Liz teaches China how to read, as well as about geography, other cultures, scientific phenomena like gravity and electricity, and some of the English language.

This is not just an intellectual education, but a sensorial one as well: they taste tea from England, Liz shows China artworks she brought across the Atlantic, she dresses China in English clothing, and they have an intense sexual relationship in which “she did something no one had ever done to me...she grabbed my hand and taught me to touch

myself” (116). Crucially, these learning experiences make China’s world grow in detail and complexity, giving her a more global sense: “This *ball-shaped world* came to life through Liz’s stories...She started populating it with sacred cows, soft saris, hot Indian curry, African tribesmen...” (19, my emphasis).

China’s global perspective, grounded in the education she receives from Liz, resonates with the transformation in values during the Scientific Revolution and the Enlightenment, which go on to directly shape the goal of “civilization” in the Americas: rationality, global awareness, individual autonomy, and the power of the human mind to solve problems. This is another way to understand the importance of “light” in the novel—as an allusion to the Enlightenment (in Spanish, *La Iluminación*) and the abstract mental process of expanding one’s conception of the world.

Cabezón Cámara’s novel draws a clear connection between this expansion and energy intensity, highlighting a material component usually left out of immaterial understandings of knowledge. “The power of Great Britain isn’t in armies or banks,” Liz explains to China, “*our strength comes from speed*, beating the clock, trailblazing, cutting production times, faster ships, machine guns, banking transactions made in a matter of days, above all the power of the railways dividing the earth (44, my emphasis).” The novel also points to the environmental destruction caused by this energy intensity: “Thanks to steam power,” China says, “we no longer drink the lash of the whip on the oarsmen’s backs. But we do drink choking coal miners” (49). Liz describes the London sky as “leaden and smoky from the locomotives” (43).

However, the ambivalence still remains. The epiphenomena of science, technology, and knowledge are coded as desirable within the descriptive language of the novel, even as they are marked as polluting. When China kisses Liz, China's tongue is "aflame like Turner's locomotive in the blaze of a London dawn," connecting China's burning, explosive desire to that of a fiery engine (79). China leaves behind her abusive situation with Fierro "with the speed and force of a locomotive," (73). The energy intensity of the train is related to China's liberation. While these moments rest in the metaphorical, literary sphere, they evoke a speculative line of causality, or at the very least a fertile ground of interaction. Marshall McLuhan defines technology as expanding the bodily capacities; cross-Atlantic travel, scientific tools, and energy intensive systems such as global trade and transport, *do* something for China, expanding her world in a material and intellectual sense.⁵² While Cabezón Cámara's novel clearly critiques coloniality, the tension between world expansion and world destruction remains acute, unresolved.

Relationships and Things

The novel's aesthetic and thematic explorations nuance this question. By exploring China's relationality with other people, animals, and things, Cabezón Cámara offers a link between what Donna Haraway calls "becoming worldly" and "becoming-with," (*When Species* 3-4). As China first comes into her own, learning about the world and gaining a sense of self, this process happens largely through an increased articulation

⁵² See *The Medium is the Message: An Inventory of Effects*, Marshall McLuhan, 2001.

of subject and object. China becomes more of a subject—she is given a name, going from being “*a china* [a Gaucho woman]” to “China,” she articulates personal goals and desires, she gains confidence. This transformation comes largely through an engaged attention with *objects* of study, such as maps, books, and exotic food items. China becomes a knower of the world in the thoroughly modern sense, what Theodor Adorno calls the “bourgeois I” (189).

By the end of the novel, however, China does not resemble a bourgeois I, but instead something fuzzier around the edges, intimately tied to other beings. First glimpses of this process come through her relationship with the dog that inspires her to go on an adventure to find her own radiance. She names him “Estreya [star]” and he becomes her companion for the remainder of the novel. Estreya remains a constant character in the novel, with China noting his reactions to situations just as she notes those of fellow humans such as Liz. China says that she and Estreya “were growing up together” and that she loves him with a “violent passion” (17-18). Their relationship is one of adopted kin that is bi-directional—not only does Estreya look to China for safety, but China too considers herself kept by the dog. To mark this, she takes Estreya’s name as her own, becoming “China Josephine Star Iron” (22-23, original).

China and Estreya’s relationship recalls what Donna Haraway names “companion species,” co-travelers that do not simply live together, but are constitutive of one another, “in which none of the partners pre-exist the relating, and the relating is never done once and for all” (*Companion* 12). Haraway pushes back on the problematic narratives told

about canine and human enmeshment, such as “Man took the (free) wolf and made the (servant) dog and so made civilization possible” (28). She argues that folded into any narrative about how dogs became domesticated is the story of how humans became domesticated, too. With these stories always come definitions of “nature” and “culture,” as well as “subject” and “object.” However, seeing dogs and people as co-evolving in “an unending dance of distributed and heterogeneous agencies” helps Haraway dissolve the illusion of the all-powerful “I” (*Companion* 24, 28). This work is ethical for Haraway, as well as deeply feminist. It calls on her to think in terms of the relation, which is “the smallest unit of analysis” that allows us to see “significant otherness at every scale” (24). Haraway’s point of entry may be dogs and people, but her “companion species” frame refers to all kinds of creatures, from gut bacteria to plants.

The novel’s interest in relationality goes beyond those forged between living organisms. I detect this through Cabezón Cámara’s aesthetic rendering of what Levi Bryant calls a “flat ontology,” where “humans occupy no privileged place within being” and “subjects, grounds, fictions, technology, institutions, etc., are every bit as real as quarks, planets, trees...” (32). In such a flattening, the hierarchy of being goes horizontal, de-privileging the knowing human subject that grasps the world. At the same time, everything gets recognized as material and interconnected. This horizontal shift is often accompanied by a move from subjects/objects to things, or as Jane Bennet puts it, “vivid entities not entirely reducible to the contexts in which (human) subjects set them” (5). We can see this in a pivotal dinner party scene between China, Liz, and the fictional author Hernández:

“Colours became detached from their objects and floated over them, obscuring them and leaving them behind like dead bodies, like broken eggshells impregnated with reds and whites. White, I could see the whiteness of Liz’s skin rise above the dining table, above the delicacies Hernández had spread before us, above Hernández himself, who was holding forth about livestock farming being a form of civilisation nowadays, a profession requiring scientific methods and refined intelligence...above the jug and wash bowl, above the state of culture of a society that values equally a work of art and a machine... above the silver cutlery...above the pink silk dress that she was wearing that had a boat neckline, no, a square neckline, a French gown...” (89-90).

In this scene, everything—people, food, concepts, items—are joined together in a roving sentence that goes on for pages, creating a chorus resembling what Bruno Latour calls a “parliament of things,” where both human and nonhuman actors get a chance to speak and represent themselves (*We Have* 142). What sets off the chorus is the breakdown of hierarchies of being as laid out in traditional Western metaphysics. Whereas Aristotle’s ontological categories differentiate between substances (subjects) and accidents (or predicates), the line between those two becomes blurred when the colors free themselves (Studtmann).⁵³ Objects *qua* objects are abandoned like “dead bodies,” but this does mean that the things left behind are then lifeless: by the end of the

⁵³ It is interesting to note here that in Aristotle’s *Categories*, it is exactly the color white that he uses as an example of a predicate that can be considered accidental, and for that reason dependent, upon another substance.

scene, they take over, overturning themselves, toppling, falling, and creating a mess at the table.

The mess of broken plates and fallen food signals a subtle challenge to Hernández's dominance and, by extension, the dominating worldview he espouses. As Hernández yells things like, "...we are putting the music of civilization into the flesh of these larvae...", smashing his fist on the table, his eyes start to move on their own: "Se le iba uno para un lado y otro para el otro [one went to one side and one to the other]" (92, my trans). From this moment, Hernández faints and ceases to be the subject of the clauses: "...cayó sobre la mesa su cabeza de patriarca rural...se volcaron las copas... el vino se expandió por el mantel... saltó al suelo una cabeza de chanco [his rural, patriarchal head fell on the table...the glasses capsized...the wine expanded across the tablecloth...the pig's head jumped to the floor]" (92, my trans). Far from scenes of talking tableware from Disney's *Beauty and the Beast*, the tableau Cabezón Cámara constructs doesn't simply transfer human-style agency over to the wineglasses. Instead, she uses pronominal verbs (se expandió, se volcaron) that allow one to obscure or nuance the "actor" doing the action. The glasses didn't capsize *themselves*, but Cabezón Cámara doesn't identify one single subject that did. Instead, the glasses, wine, pig's head, Hernández's eyeballs, and more are all caught up in energy transfers moving around the room.

The horizontality of the scene is powerful precisely because it points to the fact that Hernández is not in fully in control, despite his insistence that he is. Further, it

highlights relationships between things that all exist on the same plane, affecting (and being affected) by each other: Hernández's screamy sermon on the "consolidation of the Argentine Nation" contributes to the elements of the scene, just as his hand does, and just as the table does, too (91). How can we account for this plane where everything is related? The prevalence of the color white announces it to the reader: the scene draws a clear connection between racialized colonization (European white supremacy) and all of the things in the room, tied together by it. This is a dinner where systems of power are on display, such as the patriarchal, colonial, and racial power of Hernández, who objectifies Liz and expounds upon how he will usher the "savage" Pampas into Progress. These are powers granted by energy intensive systems such as capitalism, industrialization, and colonization.

Not only are these people gathered together thanks to the flows of capital and the work of industrializing Argentina; the scene is also composed of—and held together by—material remnants of these flows. The French gown, a material remainder of European cultural dominance and the transatlantic trade routes, is as much a part of the scene as the "the state of culture of a society that values equally a work of art and a machine" (90). Indeed, they mutually constitute each other. By placing these on the same plane, offering what Jane Bennett calls a "thing perspective," the French gown becomes what Latour calls a "quasi-object": a thing that is social and material at once (51), or what Karen Barad would call "material-discursive;" it signals its network of human and nonhuman actors, an ecology (141).

These moments of “horizontal” belonging sow the seeds for different kinds of relationships. China and Estreya join forces with Liz, the Englishwoman, and later on add another wandering Gaucho, Rosario, to their family unit. Their group forges kinship ties outside of traditional familial or legal markers, and is an example of the kind of “queer family” of kin Haraway calls on for the “flourishing for rich multispecies assemblages” (*Making Kin* 160). Beyond crossing the species boundary, the group itself commits other kinds of radical subversions, such as genderqueering, polyamory, and, at the end of the novel, transspecies experimentation: the humans crawl like animals, speak with plants, and don costumes, becoming-animal in the sense proposed by Deleuze and Guattari, activating lines of flight away from the normative, the boundaried.⁵⁴

At the end of the novel, China’s crew joins with other people (some Indigenous, some not) to form an extended kinship group that practices lifeways of care and attention to the species, waterways, and land around them. As Susanna Regazzoni notes, China’s narrative voice shifts from “I” to “we” in this section, in concert with the communitarian and egalitarian approach of the group (qtd. in Fandiño 60). I take this shift in voice as the culmination of these other “relational” shifts between subject and object, signaling a much larger, cosmological sense of belonging. In communion with herbal medicines such as mushrooms, China comes to see that “*the whole world is a single animal*, us, and the ypyra leaves...and the jaguar and the dragons...and even the British railways and the huge swathes of land cleared by the Argentines”(182-3, my emphasis). This expanded “we”

⁵⁴ See “1730: Becoming-Intense, Becoming-Animal, Becoming-Imperceptible...”, *A Thousand Plateaus*, 232-309.

recalls the Spinozian substance, or the shared culture of all things in Viveiros de Castro's studies of Amerindian tribes.

Cosmic Radical Energy

Does cosmic belonging to one "single animal" change the energy narrative? In other words, how does this ending square with China's own process of wanting to shine? Are there ways to shine that are less destructive, more interactive? Beyond seeing a clear shift from the masculinist, nationalist discourse of virility surrounding the canonization of *Martín Fierro*, Cabezón Cámara's "fable of a queer and holoentic 'matria'" also quietly points to a radical energy narrative (Fleisner 2). Just as the novel opens with China's desire for "brillo," for radiance, light is the defining metaphor that closes this transformed energy narrative. Redacting her earlier description of England as itself "light," China changes her tune: "England isn't airy or light; it's the bowels of the earth, the place where iron is found, and which *spurs the planet's onward motion*" (170).

In the original Spanish, the energetic implications of China's explicit statement become clear: she says, "...de donde sale el hierro y *apura* al movimiento del planeta [where iron comes from and *hurries up* the planet's motion]" (170, my trans). England's iron—which makes the railways—increases the speed of the planet's movement or motion. While the English translation ("spurs the planet's onward motion") could mistake the sentiment as progressivist, because "onward" is a synonym for "forward," the use of "*apurar* a [to hurry up or rush]" in the original makes the idea clear. This kind of energy narrative—one in which speed and industry are equated with progress—is downgraded;

the allure of speed deflates to an annoyance and agitation. Railways rush the planet.

Instead, “light” in this final section points us to another kind of energy use:

It was as if I, having just crossed the bridge over the ditch back into the pampa, was one of those pale wispy clumps that appear on thistles after the withering of the seed-filled flowers. Flowers of a purple so vivid that it seems stolen from the sky at sunup or sundown. That’s still the way I say it, even though I now know that the sun doesn’t go up or down. It just goes around and around, burning itself out like any fire (142).

China’s expanded perspective allows her to hold multiple perspectives and ideas at once. She knows that, on the one hand, she sees the sun rise and fall and will continue to enunciate it that way. On the other, she knows that it orbits the earth. Instead of viewing fuel as never-ending—a central tenet of the fossil fuel desire—she recognizes that even the sun, here, has a limit. It burns itself out. And yet, burning itself out is the same as shining, as radiating. There is no light without flaming out; there is no life without energy use. Her vision recalls Bataille’s observation that “the sun gives without ever receiving” (28).

China’s rational knowledge, not immediately sensible by the body, does not make her *more* of a “human knower” in the Enlightenment sense. Instead, it allows her to expand and consider other perspectives. It opens her up to experiences such as the “pale wispy clumps” on thistles, which seem to bloom even after the flower has wilted and all

the seed has been dispersed. The clumps do not serve a “use” for the plant’s reproduction, and yet, they are like little fuzzy flowers, joyfully dotting the field. China’s new life resonates with this, as her group produces (and reproduces) enough to survive, but does not see these functions as the core of their vitality. Their mode of living is joy: they work in rotations, taking months off each year, leaving plenty of time for exploring, playing, and learning new things.

While life is not characterized as useful, productive, or competitive, it is also not cast in terms that are altogether calming: China says, “Life has a complex mechanism of self-perpetuation, cruel life employs beauty as a way to make us and to kill us, that’s how it renews itself over and over again” (150). Here, China considers life impersonally, as an energetic process that creates forms (beauty) to inhabit. This image recalls Simondon’s definition of nature as taking-form from an unstable, prior state, which could only be understood in terms of energy. Life cannot “die” as organisms do because life is a question of energy moving through (and then moving on). As the Fiona Apple lyric in the introduction suggests, it only “moves to move.”

This is an example of a radical energetics because burning out—using energy—is not framed in terms of exploitation or extraction, but instead in terms of light and life. Importantly, this is ultimately *impersonal*—it is not about an individual’s life, but about life itself, which is forged in connection and is ever-moving. The novel ends with an image of China, Liz, and the others on the move, invisible to the colonial eye and for that reason, able to keep surviving. She describes their existence:

“...imagine a people that disappears, a people whose colours, houses, dogs, clothes, cows and horses all gradually dissolve like a spectre: their outline turns blurry and insubstantial, the colours fade, and everything melts into the white cloud. And so we go” (188).

Their survival is contingent upon being able to shift from an object/subject perspective to a thing-powered one, recalling the earlier episode when the white jumps off of Liz’s skin. But the fading of color, the blurry outline, does not result in darkness or black, the absence of color, but in the color white: the presence of all color in the visible spectrum, the light. They don’t disappear in the sense of snuffing out a light or retreating to the shadows, but by multiplying, dispersing, and shining.

CODA: Radical Energetics at Home

In this project I have done three things: first, I have furthered theories of how energy and meaning relate to one another; second, I have identified specific works that highlight how energy and civilization are braided together in stories; third, I have suggested a new category of energy narratives. “Radical energy narratives” de-emphasize usefulness, productivity, *telos*, survival, or domination; instead, they emphasize movement for its own sake. Far from suggesting that using energy is evil, wrong, or inherently greedy, radical energy narratives celebrate using energy as an expression of vitality and creativity. But this doesn’t, then, mean a free-for-all, a never-ending garden of delights that are there for the taking: the radical energy narrative recognizes that the ego in overdrive, thinking only in terms of *my* benefit or *my* movement for movement’s sake, fails to align with reality.

This reality is that energy is not property to be owned. Further, living as if an action begins and ends with “me” as a separate entity, unbraided from the world, will only increase destruction, the opposite of vitality. Recognizing deep relationality doesn’t mean erasing the experience of desire, it just contextualizes it in an ongoing process of negotiating energy exchanges. From the metabolic to the extractive, these are not easy negotiations. Radical energy narratives do not sugarcoat this fact, but bring it out into the light, with the hope of better outcomes than what we are currently experiencing.

So if “radical energy narratives” aren’t utopic, or somehow de-materializing energy to the point that we can imagine a life completely without fuel, why does *The*

Adventures of China Iron end in paradise? Doesn't it seem kind of unrealistic, or worse, a re-creation of the modern move of romanticizing "disappearing into the wilderness"?

Answering this question will form part of my conclusion to this project. I opened this dissertation making the case that the stories we tell about energy matter because they are tied to larger social and economic processes that go about extracting, dominating, and ravaging. To respond to climate change, we need new energy narratives. *How* narratives could go about changing structural processes that hasten mass extinction has not yet been addressed in my argument. I alluded to it (before I even fully realized it) by stressing that the soul is an energy concept and vice versa. This frame helps us think about the complexities of agency and identity that spring up when discussing energy problems: who/what did what, and to whom? Where do "I" end and another begin? It also helps clarify my point that an energy transfer implies a relationship, which implies the existence of multiple perspectives (at many scales, all the way down). This is not the only thing the soul/energy framework does. It also brings the conversation into a spiritual realm where I can speak about hope, that feeling that seems to draw energy from somewhere unknown, supplying one with the strength to keep going.

When Donna Haraway wrote her feminist "Cyborg Manifesto" in the 1980s, she didn't abandon myth, but instead sought a new form of myth, "an ironic political myth faithful to feminism, socialism, and materialism" (*Manifestly* 5). This is because, Haraway argues, "myth and tool mutually constitute each other" (33). Stories do things, not in a metaphorical sense, but at the very least in a soulful one. In Haraway's "Companion Species Manifesto," Haraway notes how her Catholic upbringing influenced

her understanding of “the sign and the flesh” as one, as the word can change the bread into body, the wine into blood: “Bodies and words,” she writes, “stories and worlds: these are joined in naturecultures” (*Manifestly* 20).

As Deleuze and Guattari suggest, a book does not imitate the world, it participates in it.⁵⁵ *The Adventures of China Iron* is a radical energy narrative in this way, too: its positivity, generative spirit, and imaginative blossoming all leave a feeling of hope. The novel doesn’t need to provide a mimetic rendering of a better, less carbon-intense tomorrow. It can contribute to this work by providing nourishment to the soul (by recharging its battery). On the back cover of the novel, which I found (luckily) by browsing a bookstore in Buenos Aires:

“...Gabriela Cabezón Cámara reanima su pertinaz aventura literaria: la de fundar un mundo libre, en el que las criaturas se abracen por deseo y gocen el mismo amor de ríos, pájaros y árboles. Y no se sientan solas jamás

[Gabriela Cabezón Cámara revives her persistent literary adventure: that of creating a free world in which creatures embrace each other with desire and enjoy the same love that the rivers do, the birds and the trees. And they never, ever feel alone]” (my trans).

⁵⁵ See “Introduction: Rhizome,” *A Thousand Plateaus*, 3-25.

Nothing quicker to inspire violence or pain than that which leads someone to believe they are completely, utterly alone. This is a soul problem, which I have shown in this dissertation to also be an energy problem.

The second part of concluding this project comes not through paradise, but praxis. Beyond the narratives they contain, how can art practices embrace a radical energetics? This is an important question to ask, especially as the art world so often functions in ways that go against the kinds of politics that its aesthetic objects seemingly announce. I point to an example of a radical energetic project that could teach us lessons about how to, in practical terms, proceed as radical energeticians.

Argentine director Mariano Llinás begins his fourteen-hour, twenty-eight-minute film *La Flor* with an explanation that the film isn't really by him. Instead, it is a deep collaboration with the four women who play multiple parts in the six mini-films that make up the tome. These four women form the experimental theatrical group "Piel de Lava [Lava Skin]," and have been writing, producing, and putting on plays together for well over a decade.⁵⁶ Indeed, he adds, this film is not only made with these four women, but is in a certain way *about* these women. They would spend ten years making it together. The explanations of what this film is do not end there. Llinás explains that the film is made up of, in fact, six films, but not in their entirety (there are four beginnings, one complete story, and one ending).

⁵⁶ The actors and writers of *Piel de Lava* are Pilar Gamboa, Elisa Carricajo, Laura Paredes, and Valeria Correa. They are based in Buenos Aires, Argentina.

La Flor is not one but many retellings and makes use of multiple genres (spy, mummy, melodrama, to name a few). That said, the film does end, notably, with an adaptation of an apocryphal 19th century diary of Sarah S. Evans, an English woman who lived as a captive among Indians. But my interest in the film stems less from that segment and more from the film's overall investment in collaboration, excess, exuberance, and creation without *telos*. Llinás states in an interview that they all fell in love with fiction itself, wanting to make a film about the ever-generative quality of genre, form, and story. And they do it on a shoestring budget in a very do-it-yourself, messy way.⁵⁷ *La Flor* is many things; rushed isn't one of them. I see in this film the kind of approach to creating that could inspire ways to find habitable spaces, forged in precarious collaboration, that move to move, to spend energy painfully and joyfully as the gift it is.

⁵⁷ This is partially why the film took ten years to make. However, some of the messy edges and continuity errors are perhaps on purpose, such as the continued dubbing problems in one of the mini-films that explores the genre of the multinational spy film.

BIBLIOGRAPHY

- Adorno, Theodor. *Negative Dialectics*. Translated by E. B. Ashton, Continuum, 1973.
- Aïnouz, Karim, and Marcelo Gomes. *Viajo porque preciso, volto porque te amo*. Rec Produtores Associados, 2009.
- Aira, César. “Ars narrativa.” *Criterion* 8, 1994, pp. 1–3.
- . “El tiempo y el lugar de la literatura. acerca de El Martín Fierro Ordenado Alfabéticamente y El Aleph Engordado de Pablo Katchadjan.” *Otra Parte*, no. 19, pp. 1–5.
- . *Ema, la cautiva*. Literatura Random House, 2015.
- . *Ema, the Captive*. Translated by Chris Andrews, New Directions, 2016.
- . “La ciudad y el campo.” *Norte y sur: La narrativa rioplatense desde México*, edited by Rose Corral et al., El Colegio de México, 2000, pp. 85–94.
- Allen MacDuffie. “Charles Darwin and the Victorian Pre-History of Climate Denial.” *Victorian Studies*, vol. 60, no. 4, 2018, p. 543. DOI.org (Crossref), doi:[10.2979/victorianstudies.60.4.02](https://doi.org/10.2979/victorianstudies.60.4.02).
- Almirón, Michelle Shirley. *Beyond the Aesthetics and Social Contextualisation of José Hernández’s Martín Fierro*. 2017. The Australian National University, PhD dissertation.
- Alonso, Carlos J. *The Spanish American Regional Novel: Modernity and Autochthony*. Cambridge University Press, 1990.

Andermann, Jens. "Exhausted Landscapes: Reframing the Rural in Recent Argentine and Brazilian Films." *Cinema Journal*, vol. 53, no. 2, Winter 2014, pp. 50–70.

---. "La operación Aira: literatura argentina y procedimiento." *Roberto Arlt y el lenguaje literario argentino*, edited by Rolf Kailuweit et al., Iberoamericana Vervuert, 2015, pp. 183–98.

---. *Mapas de poder :una arqueología literaria del espacio argentino*. Beatriz Vierbo Editora, 2000.

---. *The Optic of the State: Visuality and Power in Argentina and Brazil*. University of Pittsburgh Press, 2007.

Andrade, Oswald de. "Manifiesto antropófago." *A utopia antropofágica*. Globo, 1990, pp. 47–52.

Apple, Fiona. *Fetch the Bolt Cutters*. Epic, 2020.

Aristotle. *Aristotle's Categories and Propositions (De Interpretatione)*. Translated by Hippocrates G. Apostle, Peripatetic Press, 1980.

Barad, Karen. *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning*. Duke University Press, 2007.

Barreto, Lima. *O cangaço*. Columbia Pictures, 1953.

Barthélémy, Jean-Hugues, and Barnaby Norman. *Life and Technology: An Inquiry Into and Beyond Simondon*. meson press, 2015.

- Bary, Leslie. "Oswald de Andrade's 'Cannibalist Manifesto.'" *Latin American Literary Review*, vol. 19, no. 38, 1991, pp. 35–37.
- Bataille, Georges. *The Accursed Share: An Essay on General Economy, Vol. 1: Consumption*. Translated by Robert Hurley, 1st edition, Zone Books, 1991.
- Benedetto, Antonio di. *Zama*. Adriana Hidalgo Editora, 2000.
- Bennett, Jane. *Vibrant Matter: A Political Ecology of Things*. Duke University Press, 2010.
- Bergson, Henri. *Creative Evolution*. Translated by Arthur Mitchell, Dover, 1998.
- Bloom, Harold, et al. *The Anxiety of Influence: A Theory of Poetry*. Oxford University Press, 1997.
- Borges, Jorge Luis. *El "Martín Fierro."* Alianza, 1983.
- Bouchard, Gérard, editor. *National Myths: Constructed Pasts, Contested Presents*. Taylor & Francis Group, 2013.
- Boyer, Dominic. "Energopower: An Introduction." *Anthropological Quarterly*, vol. 87, no. 2, Spring 2014, pp. 309–33.
- Brown, Bill. "Thing Theory." *Critical Inquiry*, vol. 28, no. 1, The University of Chicago Press, 2001, pp. 1–22.
- Bryant, Levi. *The Democracy of Objects*. First edition, Open Humanities Press, 2011.

- Callon, Michel, and John Law. "Introduction: Absence-Presence, Circulation, and Encountering in Complex Space." *Environment and Planning D: Society and Space*, vol. 22, no. 1, Feb. 2004, pp. 3–12.
- Cámara, Gabriela Cabezón. *Las aventuras de la China Iron*. Penguin Random House Grupo Editorial Argentina, 2017.
- . *The Adventures of China Iron*. Translated by Fiona Mackintosh and Iona Macintyre, Charco Press, 2019.
- Chakrabarty, Dipesh. "The Climate of History: Four Theses." *Critical Inquiry*, vol. 35, no. 2, Winter 2009, pp. 197–222.
- Clifford, James. "On Ethnographic Allegory." *Writing Culture: The Poetics and Politics of Ethnography*, edited by James Clifford and George E. Marcus, University of California Press, 1986, pp. 98–121.
- Cohen, Jeffrey Jerome. *Stone: An Ecology of the Inhuman*. University of Minnesota Press, 2015.
- Combes, Muriel. *Gilbert Simondon and the Philosophy of the Transindividual*. MIT Press, 2013.
- Contreras, Sandra. *Las vueltas de César Aira*. Consorcio De Editores, 2002.

- Cordero, Roberto Ponce. "The Myth of the Cannibal, Mimesis and Social Criticism in *Como era gostoso o meu francês* (1971)." *Catedral Tomada: Revista de crítica literaria latinoamericana*, vol. 5, no. 9, Jan. 2018, pp. 169–84. *doaj.org*, doi:[10.5195/ct/2017.264](https://doi.org/10.5195/ct/2017.264).
- Cunha, Euclides da. *Os sertões: campanha de canudos*. Edited by Leopoldo M. Bernucci, Atelie Editorial, 2002.
- De Boever, Arne, et al. *Gilbert Simondon: Being and Technology*. Edinburgh University Press, 2012.
- DeLanda, Manuel. *A Thousand Years of Nonlinear History*. Zone Books, 1997.
- Deleuze, Gilles. *Cinema 2: The Time-Image*. University of Minnesota Press, 1986.
- Deleuze, Gilles, and Félix Guattari. *A Thousand Plateaus: Capitalism and Schizophrenia*. Translated by Brian Massumi, University of Minnesota Press, 1987.
- Deneys-Tunney, Anne, et al. *Rousseau Between Nature and Culture Philosophy, Literature, And Politics*. De Gruyter, 2016.
- Derrida, Jacques. *Of Grammatology*. Translated by Gayatri Spivak, JHU Press, 2016.
- "Domingo Faustino Sarmiento | President of Argentina." *Encyclopedia Britannica*, www.britannica.com/biography/Domingo-Faustino-Sarmiento. Accessed 23 Apr. 2021.
- Duffy, Eve M., and Alida C. Metcalf. *The Return of Hans Staden: A Go-between in the Atlantic World*. Johns Hopkins University Press, 2011.

- Dunn, Christopher. *Brutality Garden: Tropicália and the Emergence of a Brazilian Counterculture*. University of North Carolina Press, 2001.
- . *Contracultura: Alternative Arts and Social Transformation in Authoritarian Brazil*. The University of North Carolina Press, 2016.
- . "It's Forbidden to Forbid." *Américas*, vol. 45, no. 5, 1993, p. 14.
- Echevarría, Roberto González. *Myth and Archive: A Theory of Latin American Narrative*. Cambridge University Press, 2006.
- Echeverría, Esteban. *La cautiva*. Linkgua, 2011.
- Elliott, Tomas. *The Anxiety of Evolution: Biological and Cultural Adaptation From Marcel Proust to Peter Greenaway*. University of Pennsylvania, 2021, PhD dissertation.
- Fandiño, Laura. "Canon, espacio, y afectos en *Las aventuras de La China Iron*, de Gabriela Cabezón Cámara." *Hispanófila*, vol. 186, no. 1, 2019, pp. 49–66.
- Fariña, Oscar. *El guacho Martín Fierro*. Factotum Ediciones, 2011.
- Fernández, Nancy. *Narraciones viajeras :César Aira y Juan José Saer*. Biblios, 2000.
- Fleisner, Paula. "El desierto era parecido a un paraíso. Aventuras posthumanas en una novela de G. Cabezón Cámara." *Veritas*, vol. 65, no. 2, Aug. 2020, pp. 1–13.
- Forman, Henry James. "Keyserling Casts a Cultural Horoscope." *The New York Times*, 29 May 1927, p. 29.

Freud, Sigmund. *Totem and Taboo*. Translated by James Strachey, W. W. Norton and Company, 1950.

Furtado, Gustavo. "The Borders of Sense: Revisiting *Iracema, uma transa amazônica* (1974)." *Journal of Latin American Cultural Studies*, vol. 22, no. 4, 2013.

Geirola, Gustavo. "Eroticism and Homoeroticism in Martín Fierro." *Bodies and Biases: Sexualities in Hispanic Cultures and Literatures*, edited by David William Foster and Roberto Reis, University of Minnesota Press, 1996, pp. 316–32.

Geraghty, Niall. "Ema Is by Nature a Political Animal: Politics and Capitalism in César Aira's *Ema, la cautiva*." *Journal of Latin American Cultural Studies*, vol. 23, no. 1, 2014, pp. 33–50.

---. *The Polyphonic Machine: Capitalism, Political Violence, and Resistance in Contemporary Argentine Literature*. University of Pittsburgh Press, 2018.

Gilbert, Scott F., et al. "A Symbiotic View of Life: We Have Never Been Individuals." *The Quarterly Review of Biology*, vol. 87, no. 4, Dec. 2012, pp. 325–41.

Gonzatto da Silva, Camila. "Viajo porque preciso, volto porque te amo - entre a arte e o cinema, a opção pelo cinema." *Sessões do imaginário*, vol. 1, no. 25, 2011.

Goodbody, Axel, and Bradon Smith. "Stories of Energy: Narrative in the Energy Humanities." *Resilience: A Journal of the Environmental Humanities*, vol. 6, no. 2–3, University of Nebraska Press, 2019, pp. 1–25.

Graedon, Alena. "César Aira's Infinite Footnote to Borges." *The New Yorker*,
<https://www.newyorker.com/books/page-turner/cesar-airas-infinite-footnote-to-borges>.

Accessed 7 May 2021.

Gramuglia, Pablo Martínez. "El libro nacional de los argentinos: las primeras lecturas del
 Martín Fierro." *Decimonónica*, vol. 4, no. 2, Summer 2007, pp. 61–76.

Grusin, Richard A. "Radical Mediation." *Critical Inquiry*, vol. 42, no. 1, Autumn 2015, pp.
 124–48.

Gunder Frank, Andre. "The Development of Underdevelopment." *Monthly Review*, Sept.
 1966.

Haberly, David T. "Scotland on the Pampas: A Conjectural History of *Facundo*." *Bulletin of
 Spanish Studies*, vol. 83, no. 6, 2006, pp. 789–813.

Haraway, Donna. "Anthropocene, Capitalocene, Plantationocene, Chthulucene: Making Kin."
Environmental Humanities, vol. 6, 2015, pp. 159–65.

---. *The Companion Species Manifesto: Dogs, People, and Significant Otherness*. Prickly
 Paradigm Press, 2007.

---. *Manifestly Haraway*. University of Minnesota Press, 2016.

---. "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial
 Perspective." *Feminist Studies*, vol. 14, no. 3, Autumn 1988, pp. 575–99.

---. *Staying With the Trouble: Making Kin in the Chthulucene*. Duke University Press, 2016.

Heidegger, Martin. *The Question Concerning Technology, and Other Essays*. Translated by William Lovitt, Garland Publishing, 1977.

Hernández, José. *Martín Fierro: edición crítica*. Edited by Élica Lois and Ángel Núñez, 1st ed., Allca XX Université Paris X, 2001.

James, William. *The Principles of Psychology*. Dover Publications, 1950.

Johnson, Adriana Michéle Campos. *Sentencing Canudos: Subalternity in the Backlands of Brazil*. University of Pittsburgh Press, 2010.

Johnson, Randal, and Robert Stam. *Brazilian Cinema*. Rutherford, 1982.

Jones, Christopher F. "Petromyopia: Oil and the Energy Humanities." *Humanities*, vol. 5, no. 2, 1 June 2016, p. 36.

Juan-Navarro, Santiago, and Theodore Robert Young, editors. *A Twice-Told Tale: Reinventing the Encounter in Iberian/Iberian American Literature and Film*. University of Delaware Press ; Associated University Press, 2001.

Keyserling, Hermann. *Le monde qui naît*. Translated by Christian Sénéchal, Stock, 1927.

---. *The World in the Making*. Translated by Maurice Samuel, Harcourt, Brace and Company, 1927.

Knudson, Cory. "Fuel Cuts, Part 2: Entropic Life and Survival of the Fittest." *PPEH Fellows Blog*, 28 May 2019, <https://ppeh.sas.upenn.edu/field-notes/fuel-cuts-part-2-entropic-life-and-survival-fittest>. Accessed 9 May 2021.

Lanctot, Brendan. *Beyond Civilization and Barbarism : Culture and Politics in*

Postrevolutionary Argentina. Bucknell University Press, 2014.

---. "Frecuencias del Martín Fierro en orden neoliberal [Frequencies of Martín Fierro in Neoliberal Order]." *Bulletin of Hispanic Studies*, vol. 94, no. 3, Liverpool University Press, 2017, pp. 351–72.

Latour, Bruno. "An Attempt at a 'Compositionist Manifesto.'" *New Literary History*, no. 41, 2010, pp. 471–90.

---. *We Have Never Been Modern*. Harvard University Press, 2012.

Law, John. "On the Methods of Long-Distance Control: Vessels, Navigation and the Portuguese Route to India." *The Sociological Review*, vol. 32, no. 1, 1984.

LeMenager, Stephanie. *Living Oil: Petroleum Culture in the American Century*. 2016.

Léry, Jean De. *History of a Voyage to the Land of Brazil, Otherwise Called America*. Translated by Janet Whatley, University of California Press, 1990.

Lévi-Strauss, Claude. *The Raw and the Cooked: Mythologiques, Volume I*. Translated by John Weightman and Doreen Weightman, University of Chicago Press, 1983.

---. *The Story of Lynx*. Translated by Catherine Tihanyi, New edition, University of Chicago Press, 1996.

---. *Tristes Tropiques*. Translated by John Weightman and Doreen Weightman, Penguin Books, 1992.

“Light, n.1.” *OED Online*, Oxford University Press, Accessed Nov. 2020.

Lindberg, Susanna. “Being with Technique - Technique as Being-with: The Technological Communities of Gilbert Simondon.” *Continental Philosophy Review*, no. 52, 2019, pp. 299–310.

Link, Daniel. “Rethinking Past Present.” *Review: Literature and Arts of the Americas*, vol. 40, no. 2, 2007.

Llinás, Mariano. *La Flor*. El Pampero Cine, 2018.

Luca, Tiago de. “Personal Images, Collective Journeys: Media and Memory in *I Travel Because I Have to, I Come Back Because I Love You*.” *New Cinemas: Journal of Contemporary Film*, vol. 12, no. 1 & 2, 2014, pp. 17–41.

Ludmer, Josefina. *El género gauchesco: un tratado sobre la patria*. Libros Perfil S.A., 2000.

Lugones, Leopoldo. *El payador*. Stockcero, 2004.

Macdonald, Graeme. “The Resources of Fiction.” *Energy Humanities: An Anthology*, edited by Imre Szeman and Dominic Boyer, Johns Hopkins University Press, 2017.

Martel, Lucrecia. *Zama*. The Match Factory, 2017.

Martin-Jones, David. “The Cinematic Temporalities of Modernity: Deleuze, Quijano and ‘How Tasty Was My Little Frenchman.’” *Insights*, vol. 6, no. 1, 2013, pp. 2–12.

Massumi, Brian. "'Technical Mentality' Revisited: Brian Massumi on Gilbert Simondon."

Parrhesia, No. 7, 2009, pp. 36-45.

McLuhan, Marshall, and Quentin Fiore. *The Medium Is the Massage: An Inventory of Effects*.

Ginkgo Press, 2001.

Merleau-Ponty, Maurice. *Phenomenology of Perception*. Translated by Donald A. Landes,

Routledge, 2012.

Métraux, Alfred. *La religion des Tupinamba et ses rapports avec celle des autres tribus Tupi-*

Guarani. E. Leroux, 1928.

Montaldo, Graciela R. *De pronto, el campo: literatura argentina y tradición rural*. B. Viterbo

Editora, 1993.

Morgan, Lewis Henry. *Ancient Society*. University of Arizona Press, 1985.

Murphy, Michelle. "Studying Unformed Objects: Deviation." *Fieldsights*, July 2013,

<https://culanth.org/fieldsights/studying-unformed-objects-deviation>. Accessed 9 May

2021.

Nagib, Lúcia. *Brazil on Screen*. Bloomsbury Academic, 2007.

---. "Multimedia Identities: An Analysis of *How Tasty Was My Little Frenchman*." *Screen*,

vol. 60, no. 1, Spring 2019.

---. *World Cinema and the Ethics of Realism*. Continuum, 2011.

Nancy, Jean-Luc. *The Inoperative Community*. Translated by Peter Connor, University of Minnesota Press, 1991.

Nunes, Benedito. “A antropofagia ao alcance de todos.” *A utopia antropofágica: obras completas de Oswald de Andrade*. Editora Globo, 1990, pp. 5–39.

---. “Anthropophagisme et surréalisme.” *Surréalisme périphérique*, edited by Luis de Moura Sobral, Université de Montréal, 1984, pp. 159–79.

---. *Oswald Canibal*. Editora Perspective, 1979.

Nunes, Zita. *Cannibal Democracy: Race and Representation in the Literature of the Americas*. University of Minnesota Press, 2008.

Nye, David E. “Energy Narratives.” *American Studies in Scandinavia*, vol. 25, 1993.

Ortiz, Roberto José. “Agro-Industrialization, Petrodollar Illusions and the Transformation of the Capitalist World Economy in the 1970s: The Latin American Experience.” *Critical Sociology*, vol. 42, no. 4–5, 2016, pp. 599–621.

Oyler, Lauren. “Discovery.” *The Atlantic*, 9 Jan. 2021, <https://www.theatlantic.com/books/archive/2021/01/lauren-oyler-new-fiction-discovery/617540/>. Accessed 9 May 2021.

Peters, John Durham. *The Marvelous Clouds: Toward a Philosophy of Elemental Media*. University of Chicago Press, 2015.

Pollan, Michael. *How to Change Your Mind: What the New Science of Psychedelics Teaches Us About Consciousness, Dying, Addiction, Depression, and Transcendence*. Penguin Press, 2018.

“Power | Physics.” *Encyclopedia Britannica*, <https://www.britannica.com/science/power-physics>. Accessed 17 Apr. 2021.

Rabasa, José. *Inventing America: Spanish Historiography and the Formation of Eurocentrism*. University of Oklahoma Press, 1993.

Rama, Ángel. *La ciudad letrada*. Ediciones del Norte, 1984.

Ramos, Paulo Roberto. “Nelson Pereira Dos Santos: resistência e esperança de um cinema.” *Estudos avançados*, vol. 21, no. 59, 2007.

Rocha, Glauber. *Deus e o diabo na terra do sol*. Copacabana Filmes, 1964.

Rojas, Ricardo. “Estética del poema.” *Martín Fierro: edición crítica*, 1st ed., Allca XX Université Paris X, 2001, pp. 890–99.

Rotker, Susana. *Captive Women: Oblivion And Memory In Argentina*. University of Minnesota Press, 2002.

Rousseau, Jean-Jacques. *Discourse on the Origin and Foundations of Inequality Among Men*. Translated by Franklin Philip, Oxford University Press, 1994.

Sadler, Darlene Joy. *Nelson Pereira Dos Santos*. University of Illinois Press, 2003.

Saer, Juan José. *El concepto de ficción*. Ariel, 1997.

Salem, Helena. *Nelson Pereira dos Santos: o sonho possível do cinema brasileiro*. Editora Nova Fronteira, 1996.

Salles, Christian Bruno Alves. “A utopia antropofágica: rastros e horizontes.” *Sociologia & antropologia*, vol. 8, no. 1, Apr. 2018, pp. 273–95.

Salles, Walter. *Central do Brasil*. Europa Filmes, 1998.

Santos, Nelson Pereira dos. *How Tasty Was My Little Frenchman*. Agrigator Media, Alexander Street, 1971, <https://video.alexanderstreet.com/watch/how-tasty-was-my-little-frenchman>.

---. *Vidas Secas*. Sinofilmes, 1963.

Sarmiento, Domingo Faustino. *Facundo o civilización y barbarie en las pampas argentinas*. Stockcero, Inc, 2003.

---. *Facundo: Civilization and Barbarism*. Translated by Kathleen Ross, University of California Press, 2003.

Sartre, Jean-Paul. *Jean-Paul Sartre: Basic Writings*. Routledge, 2002.

Schneider, Eric D., and Dorion Sagan. *Into the Cool: Energy Flow, Thermodynamics, and Life*. New edition, University of Chicago Press, 2006.

Schrader, Astrid. "The Time of Slime: Antropocentrism in Harmful Algal Research."

Environmental Philosophy, vol. 9, no. 1, Spring 2012, pp. 71–94.

Schwarz, Roberto. *Misplaced Ideas: Essays on Brazilian Culture*. Verson, 1992.

Scott, Heidi C. M. *Fuel : An Ecocritical History*. Bloomsbury Academic, 2018.

Shapiro, Judith. "From Tupã to the Land Without Evil: The Christianization of Tupi-Guarani Cosmology." *American Ethnologist*, vol. 14, no. 1, Feb. 1987, pp. 126–39.

Simondon, Gilbert. *On the Mode of Existence of Technical Objects*. Translated by Ninian Mellamphy, Aubier, Editions Montaigne, 1958.

Smil, Vaclav. *Energies: An Illustrated Guide to the Biosphere and Civilization*. Reprint edition, The MIT Press, 2000.

---. *Energy and Civilization : A history*. The MIT Press, 2017.

Smith, Bradon. "Imagined Energy Futures in Contemporary Speculative Fictions." *Resilience: A Journal of the Environmental Humanities*, vol. 6, nos. 2-3, Spring-Fall 2019, pp. 136-154.

Staden, Hans, et al. *Hans Staden's true history: an account of cannibal captivity in Brazil*. Duke University Press, 2008.

Stam, Robert. *Tropical Multiculturalism: A Comparative History of Race in Brazilian Cinema and Culture*. Duke University Press, 1997.

Stiegler, Bernard. *Philosopher Par Accident*. Galilée, 2004.

---. *Technics and Time: The Fault of Epimetheus*. Stanford University Press, 1998.

Stoekl, Allan. *Bataille's Peak: Energy, Religion, and Postsustainability*. University of Minnesota Press, 2007.

Studtmann, Paul. "Aristotle's Categories." *The Stanford Encyclopedia of Philosophy*, edited by Edward N. Zalta, Fall 2018, Metaphysics Research Lab, Stanford University, 2018. *Stanford Encyclopedia of Philosophy*,
<https://plato.stanford.edu/archives/fall2018/entries/aristotle-categories/>.

Szeman, Imre, and Dominic Boyer. *Energy Humanities: An Anthology*. JHU Press, 2017.

Tsing, Anna. *The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins*. Princeton University Press, 2017.

Villegas, Tomás. "Escribir es construir un lugar habitable en el mundo: entrevista a Gabriela Cabezón Cámara." *El Diletante*, 22 Apr. 2020, <http://eldiletante.net/trabajos/entrevista-a-gabriela-cabazon-camara>. Accessed 9 May 2021.

Viñas, David. *De Sarmiento a Cortazar: literatura argentina y realidad política*. Ediciones Siglo Veinte, 1974.

---. "José Hernández, del indio al trabajo y a la conversión (1872-1879)." *Indios, ejército y frontera*, Siglo Veintiuno Editores, 1982, pp. 159–70.

Viveiros de Castro, Eduardo. *Cannibal Metaphysics*. University of Minnesota Press, 2014.

Voosen, Paul. "Meet Vaclav Smil, the Man Who Has Quietly Shaped How the World Thinks about Energy." *Science / AAAS*, 21 Mar. 2018,

<https://www.sciencemag.org/news/2018/03/meet-vaclav-smil-man-who-has-quietly-shaped-how-world-thinks-about-energy>. Accessed 9 May 2021.

Wallace-Wells, David. *The Uninhabitable Earth: Life After Warming*. 1st Edition, Tim Duggan Books, 2019.

White, Leslie. "Energy and the Evolution of Culture." *American Anthropologist*, vol. 45, no. 3, Sept. 1943, pp. 335–56.

---. *The Science of Culture: A Study of Man and Civilization*. Grove Press Inc., 1949.

Wildberg, Christian. "Neoplatonism." *The Stanford Encyclopedia of Philosophy*, edited by Edward N. Zalta, Summer 2019, Metaphysics Research Lab, Stanford University, 2019. *Stanford Encyclopedia of Philosophy*,

<https://plato.stanford.edu/archives/sum2019/entries/neoplatonism/>.

Wintroub, Michael. "Cannibal Histories: Some Comments on Nelson Pereira Dos Santos's How Tasty Was My Little Frenchman." *Fiction and Film for Scholars of France*, 13 Mar. 2013, <https://h-france.net/fffh/classics/cannibal-histories-some-comments-on-nelson-pereira-dos-santoss-how-tasty-was-my-little-frenchman/>. Accessed 9 May 2021.

Wolchover, Natalie. "A New Thermodynamics Theory of the Origin of Life." *Quanta Magazine*, <https://www.quantamagazine.org/a-new-thermodynamics-theory-of-the-origin-of-life-20140122/>. Accessed 16 Feb. 2021.

---. "First Support for a Physics Theory of Life." *Quanta Magazine*,

<https://www.quantamagazine.org/first-support-for-a-physics-theory-of-life-20170726/>.

Accessed 24 Apr. 2021.

Young, Theodore Robert. "You Are What You Eat: *Tropicalismo* and *How Tasty Was My Little Frenchman*." *A Twice-Told Tale: Reinventing the Encounter in Iberian/Iberian American Literature and Film*, University of Delaware Press, 2001, pp. 80–88.