Introduction: Driving the Anthropocene

From Ecomobilities: Driving the Anthropocene in Popular Cinema, *forthcoming from Lexington Press*

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It's not looking good…

In May of 2021, the World Meteorological Organization (WMO) wrote a press release announcing that the odds were increasing that average annual temperatures for the globe will reach 1.5° C above pre-industrial levels in the next five years.[1] That number is a threshold that most countries of the world have been working to stay below as it would keep the damage of a warming planet as minimal as possible at this point. Sea levels will continue to rise due to melting glaciers, for example, but staying under 1.5° C means that they would rise at least ten centimeters less than if we only met our previous goal of staying between 1.5-2° C.[2] In effect, keeping our global emissions down won't reverse or even stop climate change from happening, but our lives won't be as terrible as they could be if we were to do nothing.

What makes this news all the more depressing is that despite the global impact of the COVID-19 pandemic on travel, transportation, and industry, from a climate change perspective we are no better off than we were before the lockdowns. Yes, deadly air pollutants like nitrogen dioxide (NO_2) dropped during this moment in time,

improving the air in cities and saving thousands of lives, but, stressed the WMO, we are still hurtling towards crossing that 1.5° C threshold.[3]

I am not interested in simply rehashing the depressing data and predictions though. The last thing we need at this moment is more existential dread. Rather, my goal is to question how some countries, primarily the United States, have responded to the knowledge of climate change and what could be done to limit its effects. Despite the seemingly newness of climate change and global warming as a focus of study in the twenty-first century, humans have long been aware of their ability to alter the weather through the consequences of industry.[4] Even the concept of the greenhouse effect, the mechanism through which a layer of gasses in the atmosphere helps regulate temperatures on Earth, was worked out in the early nineteenth century.[5] The first hypothesizing on global warming took place in 1896 by Swedish scientist Svante Arrhenius, though he dramatically underestimated how long it would take for humans to significantly increase the amount of carbon dioxide (CO_2) in the atmosphere.[6]

So if we have known about the possibilities of environmental degradation, global warming, and climate change for well over a century now, why have we humans been so reluctant to do anything about it? *Ecomobilities* is an effort to get at the ideology at work, especially in the twentieth and twenty-first centuries that has been at odds with the climate crisis. Specifically, I want to explore the ideological connections between automobiles, the environment, and the end of the world. I am not so much interested in

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the harmful emissions of the cars themselves, but instead in what I see as a modern inability to envision traveling through ecosystems, including urban ones, without the aid of an automobile. What is it about the car that makes it inseparable from modern life despite the evidence that it is so damaging for environmental health? The answer, I will argue, is inherently ideological, and something we must begin to grasp if we are to actually do anything about our future environmental health. The automobile is not the only contributor to climate change, and clearly a part of a larger capitalist system, but it is a commodity that reveals much about how we got into this crisis. To get at this ideology, I have chosen to work in popular film. This is not a work of film theory but rather an effort to use film to reflect on ideologies affecting our response to climate change. Specifically, I contend that an ideology of American automobility has influenced how we believe we ought to respond to warming temperatures and shifting ecosystems. The stories we tell reveal the lens through which we see the world.

What's in a Name? Troubling the Anthropocene

I want to use what follows to discuss the automobile within the context of the Anthropocene, a proposed new geological epoch that marks the new atmospheric composition since the Industrial Revolution. The term itself was coined in the year 2000 by scientists Paul J. Crutzen and Eugene F. Stoermer in response to the obvious human effects on the natural systems of the Earth:

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> Considering these and many other major and still growing impacts of human activities on earth and atmosphere, and at all, including global, scales, it seems to us more than appropriate to emphasize the central role of [hu]mankind in geology and ecology by proposing to use the term "anthropocene" for the current geological epoch. The impacts of current human activities will continue over long periods. According to a study by Berger and Loutre, because of the anthropogenic emissions of CO_2, climate may depart significantly from natural behavior over the next 50,000 years.[7]

Officially, Crutzen, Stoermer and other scholars would stop the Holocene, the epoch in which we currently exist, at the end of the nineteenth century to match it with the beginning of a global industrial revolution and thus significant fossil fuel consumption.[8] Such a break reflects the majority of climate science, including the pre-industrial temperature levels used by the Intergovernmental Panel on Climate Change (IPCC) and the WMO, which refers to a specific reference period from 1850-1900, ideally representing a time before we humans began pumping greenhouse gases into the atmosphere in previously unseen numbers.[9]

While the term Anthropocene has been accepted and widely used in social and cultural studies of Earth's changing climate, it is not the only way to describe a new epoch on this planet. The most useful alternative is Andreas Malm's term "Capitalocene," which, rather than replace Anthropocene, serves to remind us as to just how exactly human action has resulted in planetary change. For Malm, the use of *anthropos* is an "indefensible abstraction" when it comes to making sense of our changing climate as it places all of humanity as both a monolithic cause and victim of the impending ecological crisis.[10] "Unlikely to gather anything like a consensus behind

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it, a more scientifically accurate designation, then, would be 'the Capitalocene.' This is the geology not of [hu]mankind, but of capital accumulation."[11] Since both resource extraction and quest for profit have driven the increase in greenhouse gasses, it stands to reason that the capitalists are to blame for this mess. To make matters worse, economic inequality means that not all humans will suffer through this crisis equally: "there *will* be lifeboats for the rich and privileged, and there will *not* be any shared sense of catastrophe."[12] Why blame humanity for this new epoch when an elite few brought us into it?

The Capitalocene has been taken up by Jason W. Moore, who has extensively explored the interweaving of nature and capital rather than a more generalized study of nature and humans. Moore argues that the dualism of Nature/Society has allowed a violence that "drips with blood and dirt" in that nature has been rendered passive.[13] For Moore, the urgent move is to think of how the dualism of nature and society has limited our abilities to understand the climate crisis. By conceiving of capitalism-in-nature, we can begin to think of how capitalism works "*through*, rather than upon *nature*."[14] Moore pushes for an ontological break in the separation of nature and society by studying both within a historical materialist relationship:

> There has been too little investigation into how bundles of human and extra-human relations constitute modernity's historical natures, and how patterns of power and capital are producers *and* products of those natures. The conventional wisdom says that modernity makes environmental history. But is not a more relational proposition more tenable: modernity *as* environmental history?[15]

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The theme running throughout Moore's work is to fight against any dualism when it comes to human society and the natural world. Even this push for a recognition of capital's role in the climate crisis is not to separate or pit capital versus nature, but rather to set them together. I see Moore's work as being evocative of Neil Smith's *Uneven Development: Nature, Capital, and the Production of Space*, in which he argues that the externality of nature from human society is connected to the rise of capitalism yet is not simply a result of capital. Smith is arguing for a dialectic, rather than mere interactions between two spheres, much as I see Moore calling for with the Capitalocene. For Smith, the relationship exists within production:

> Elements of the first nature, previously unaltered by human activity, are subjected to the labor process and re-emerge to be social matter of the second nature. There, though their form has been altered by human activity, they do not cease to be natural in the sense that they are somehow now immune from non-human forces and processes—gravity, physical pressure, chemical transformation, biological interaction. But they also become subject to a new set of forces and processes that are social in origin. Thus the relation with nature develops along with the development of the social relations, and insofar as the latter are contradictory, so too is the relation with nature.[16]

This second nature of which Smith speaks is when nature has been produced through human labor. It is not less natural in the sense that physical laws no longer apply, but it is distinctly touched by societal forces. For Smith, those societal forces infect this second nature with the political and ideological. While this dialectic is not unique to modern

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society, Smith contends that our relationship with nature has been inherently changed by capitalism. As Marx puts it

> nature does not produce on the one hand owners of money or commodities, and on the other hand men possessing nothing but their own labor-power. This relation has no basis in natural history, nor does it have a social basis common to all periods of human history.[17]

And it is Marx's conception of the metabolic interaction between humans and nature that Moore builds his critique of the Anthropocene. Marx's metabolic interaction is a universal human experience, "the everlasting nature-imposed condition of human existence, and is therefore independent of every form of that existence, or rather it is common to all forms of society in which human beings live."[18] All humans must live within nature to survive, but the capitalist dramatically alters the interaction. Moore sees the placing of the Anthropocene problematic as it masks capital's relationship to this interaction. Starting the epoch with the Industrial Revolution overlooks the centuries of appropriation and exploitation of nature that facilitated the shift. "The rise of capitalism launched a new way of organizing nature, mobilizing for the first time a metric of wealth premised on labor productivity rather than land productivity."[19] The rise was not during the nineteenth century as machines replaced human hands but instead during colonial exploration starting in the fifteenth century.

> Ask any historian and she will tell you: how one periodizes history powerfully shapes the interpretation of events, and one's choice of strategic relations. Start the clock in 1784, with James Watt's rotary steam engine… and we have a very different view of history – and a very different view of modernity – than we do if we begin with the English and Dutch agricultural

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> revolutions, with Columbus and the conquest of the Americas, with the first signs of an epochal transition in landscape transformation after 1450.[20]

It is at this moment that Moore sees a distinct shift in the metabolic interaction that demands the dualistic relationship of nature and society. The Industrial Revolution can be read as a means to fix the organizational structure of capitalism to deal with earlier crises.[21]

I find incredible use in Malm's, Moore's, and Smith's historical materialist readings of the interlocking reality of nature, capital, and environmental degradation, especially the theorizing done by the latter two men. And yet, I want to signal a departure from this work by using Anthropos, rather than Capital, to describe the 'cene. Primarily, I see value in the Anthropocene in that it is a catchier title. Even Malm admitted above that it would be hard to make Capitalocene catch on. There is something to be said for grabbing a hold of an already popular name and using it in a more rigorous manner.

Moore and the others have made valid points about blaming the accumulation of capital rather than all of humanity for our climate crisis. And yet, I fear that the term Capitalocene masks just how pervasive and all-encompassing the climate crisis is. I, identifying as a radical, a leftist, surely cannot be blamed for increasing temperatures! I am fighting the capitalist bastards, after all. As Joel Wainwright and Geoff Mann write in the preface to their Climate Leviathan, "The vast proportion of historical greenhouse gases have been emitted as byproducts of the choice and activities, not of the masses of

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ordinary people, but rather a wealthy minority of the world's people."[22] While their argument for a political response to climate change goes beyond simply blaming a select few, I cannot help but get the sense that middle class North Americans and Europeans, including many academics writing about this subject are supposed to slip into the category of those without blame. I am arguing that we need to be a little more all-encompassing when it comes to the superstructural components of climate change. Following Latour, I have no wish to attack "the worker forced to travel long distances by car because she hasn't been able to find affordable housing near the factory where she works: who would dare shame her on account of her carbon footprint?"[23] But I do think we need to start dismantling such a system and that work cannot be simply to complain about elites. We must lay bare the ideologies that keep us not just reproducing the system, but unable to imagine another way forward. To stick with the name Anthropocene is not to blame humans *qua* humans for climate change but to acknowledge the implications of humans as a force of change on the planet. Not all humans must have power nor capital in order to be connected to ecological change. We can still work against class inequalities as we study societal practices across class lines.

My interest in the Anthropocene lies not in revealing the direct exploitation of nature by capital, but rather the invisible superstructural ways in which power flows to maintain the appearance that it is perfectly natural to separate ourselves from nature. The abundance of books and articles arguing for the unification of society and nature

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suggests that we all know very well that humans and nature are connected. It seems unnecessary to write yet another argument against separating society from nature. Instead, we need to get at why these repeated treatises on the hybridity of society/nature seem so necessary despite our best efforts.

The Capitalocene studies have done the heavy lifting, started by Marx, that theorizes the production link between human and nature. Building off these works, I want to mess around with ideology, a complicated, if not dirty, word in Marxist theory. Perhaps the fact that my interest is less in production and labor and more in ideology and media helps to explain why I gravitate to the Anthropocene rather than the Capitalocene. I am not trying to get at the exact moment in which the climate change began, but rather what keeps it going and makes it seemingly impossible to address. Many of the Anthropocene studies are looking to what this new reality means for the individual, even if addressing collective responses. The cause might be the accumulation and movement of capital, but many of the effects are felt at the individual level. In some cases that individual is an informed consumer, in others it is simply an alienated individual scared into paralysis by what the future holds.

As McKenzie Wark has pointed out in her own study of the Anthropocene, our response to climate change typically works in one of two ways. The first response invokes Mark Fisher's *Capitalist Realism*, in that we cannot imagine our way out of capitalism and thus cannot imagine fixing climate change without that system.[24] "This

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insists that there is no alternative, and we just have to stick with the program. If it takes the planet down with it then so be it."[25] The other option is to return to a state of society that (seemingly) existed before capitalism took over.

> The alternative narrative imagines a kind of non-technical, holistic and spiritual alternative, often drawing its images from a pre-capitalist landscape. But as was already clear to Marx, this is *capitalist romance*, a story constructed within capitalism itself as one of the byproducts of its own momentum. It is a kind of capitalist realism in negative, where we all ride bamboo bicycles, but it rarely ventures beyond an ideological mirroring of capitalist realism.[26]

Wark goes on to invoke critical theory to envision new framings of the Anthropocene to address the deficiencies of these two approaches, but I want to stick with them for a bit longer. Why is an alternative to capitalism so daunting to envision? Why must the only way to limit Earth's changing climate be to turn back the clock to a pre-capitalist state?

I am arguing that we do not fully understand the ideological work being done to make not just capitalism, but the mobilities of capitalism seem so inherently natural. The answer lies in the ideological work being done in mass culture that, as any good ideology is, is invisible to the consumer. My interest here is to specifically examine how the automobile has been represented in film as a window to an overarching ideology of American automobility. I don't just want to point out the presence of cars in films (even though I love such essays and books), but I want to trouble the very idea of the car as an ideology that affects everyday life. Until we lay bare the mobilities of our daily lives

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and connect them to the greater capitalist lens through which we see the world, we will never be able to imagine a new future on this planet.

I have found that it makes more sense to think in multiplicities rather than dialectics when it comes to reactions to climate change. I want to spend time with the *anthropos* to see our rather human reactions to what capital has wrought. I also find value in the various notions of hybridity and assemblage that have been offered to explain both the Anthropocene and the automobile.

Clearly, there are problems in the theorization. For example, Purdy's *After Nature*, with its leading title and constant references to a "(post-)natural world" thanks to human activity fails to take Marx's work into account, but his insistence on nature being completely inseparable from humanity is interesting.[27] That is, we have seen the arguments that one cannot separate society and nature, argued in a variety of ways from materialism to post-humanism.[28] But what Purdy does, and I think more so than many other scholars of the Anthropocene, is to insist that not only are they inseparable, but that humanity is always already in nature.

> The natural and the artificial have merged at every scale. Climate change makes the global atmosphere, its chemistry and weather systems, into Frankenstein's monster—part natural, part made. The same is true of the seas, as carbon absorption turns the oceans acidic and threatens everything that lives in them… Even wilderness, that emblem of untouched nature, persists where lawmaking and management create it, artificial testament to the value of natural things.[29]

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Clearly, much of this is not new ground, but the continued insistence of an inability to go to a humanless spot on the planet is emblematic of the Anthropocene. As I am interested in the automobile's role in all of this, the link between hybrid driver-car and the hybrid capital-ecosystem provides a previously untapped space of research. Both pairings also offer a chance to trouble the ideological work that renders them invisible in everyday life. What I want to challenge though, if we really are going to push forward with the Anthropocene, is this notion of "the artificial" to describe things that have come into being in the last few centuries. If we are truly in the Anthropocene then we are in an epoch of assemblage not rigid classifications.

Troubling Ideology

Ideology as it will be used here is derived from Marx, who, as summarized by Althusser, saw ideology as "the system of ideas and representations which dominate the mind of a [hu]man or a social group."[30] While such a summation might seem benign, ideology in the Marxist tradition has had a negative connotation, in that it represents a class-based view of reality. As Smith puts it, "Ideology is not simply a set of wrong ideas but a set of ideas rooted in practical experience, albeit the practical experience of a given social class which sees reality from its own perspective, and therefore only in part."[31] The ideas that constitute ideology are, if not verifiably false, incomplete perceptions of the world.

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The key aspect of a Marxist, and thus materialist conception of ideology, is that these ideas are not something plucked from the *aether*. In the first part of "The German Ideology," Marx explicitly contends that ideas are formed through material processes:

> We do not set out from what [people] say, imagine, conceive, nor from [people] as narrated, thought of, imagined, conceived, in order to arrive at [people] in the flesh. We set out from real, active [people], and on the basis of their real life-process we demonstrate the development of the ideological reflexes and echoes of this life-process. The phantoms formed in the human brain are also, necessarily, sublimates of their material life-process, which is empirically verifiable and bound to material premises. Morality, religion, metaphysics, all the rest of ideology and their corresponding forms of consciousness, thus no longer retain the semblance of independence. They have no history, no development; but men, developing their material production and their material intercourse, alter, along with this their real existence, their thinking and the products of their thinking. Life is not determined by consciousness, but consciousness by life.[32]

Marx's radical move here is to critique the acceptance of ideas as being superorganic objects to be plucked from the sky to inform human society. Ideas come from the material actions of humans interacting with one another. To understand ideas one must look at the context in which they form. Further, Marx later claims that "the ideas of the ruling class are in every epoch the ruling ideas: i.e., the class which is the ruling *material* force of society, is at the same time its ruling *intellectual* force."[33] Not only are ideas connected to material phenomena, a dominant group forces those ideas onto the underclasses.

Marx's ruling class/ruling ideology argument was taken up in the late twentieth century, first by Althusser in which he uses ideology to explain how labor and power

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relations are reproduced in a capitalist economy. Marx's ruling class/ruling ideas thesis is rejected for its repressive nature. For Althusser, ideology is not the real relationship between members of a society, but the imaginary relation of individuals to the real relations in which they exist.[34] So ideology is an idea, but one that springs forth from the material world. Where Marx contends that ideology has no history, Althusser explains that ideology is better thought as having "no history *of its own*,"[35] meaning ideology is tied both materially and historically to subjects. "An ideology always exists in an apparatus, and its practice, or practices. This existence is material."[36] Within this dialectic, Althusser quite bluntly removes the notion of "ideas" and replaces it with "practices, rituals, ideological apparatus."[37] These practices and rituals cannot be totally repressive however; subjects would not accept the ideology. An "Ideological State Apparatus" (as opposed to a repressive apparatus) allows for the continued reproduction of relations of production through the productive interpellation of individuals as subjects.[38]

Althusser is directly critiqued in Stuart Hall's essay, "Signification, Representation, and Ideology: Althusser and the Post-Structuralist Debates" in which he argues that we must go further in rejecting the repressive nature of Marx's ruling class/ruling ideas hypothesis. What Hall is most interested in "is how a society *allows* the relative freedom of civil institutions to operate in the ideological field, day after day, without direction or compulsion by the State; and why the consequence of that 'free

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play' of civil society, though a very complex reproductive process, nevertheless consistently reconstitutes ideology as a 'structure in dominance.'"[39] Hall argues that the State is far from an all-powerful repressive force, and yet, ideological reproduction benefits and reproduces the State. While Hall does evoke and agree with Michel Foucault, he works towards a middle ground between the Marxist repressive State and Foucauldian multiplicities of dispersed power. Hall's problem lies in the fact that while there is no singular State apparatus, a State does exist. For Hall, the answer lies in Gramsci's concepts of hegemony, consent, and common sense to wrestle with the complexities of class and ideology. Where both Foucault and Althusser are quick to eschew ideas and what happens in the mind of a subject, Hall pushes for a mental space of ideology, connected to, but distinct from material relations. The common sense ideas in society, those that become naturalized to the point of being thought of as 'that's just how life is,' are precisely what ideology is all about. "The point at which we lose sight of the fact that [common] sense is a production of our systems of representation is the point at which we fall, not into Nature but into the naturalistic illusion: the height (or depth) of ideology."[40] That interface of the natural and the social is where ideology exists. To change ideology then, is, as Hall argues, a process of "articulation" in which ideological signs are altered and given new common sense meanings.

Perhaps what is most important, though, is that ideology is invisible in everyday life. If ideology has been made natural in the Gramscian sense, as Hall contends, then

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the average subject would not question social relations. The problem with such a line of inquiry though, is that it tends towards a simple answer of pulling back the curtain to see reality. *The Wizard of Oz* depicts this quite literally. As the dog Toto pulls on the green curtain, revealing not the great and powerful Oz but a small, flustered man furiously pulling levers, Oz (Frank Morgan) shouts, "pay no attention to that man behind the curtain!" A more modern version of this takes place if we turn to *The Matrix*. The Matrix refers to the false consciousness in the form of a computer program that allows docile human bodies to be harvested for energy by their machine overlords. The humans stuck in goo filled pods have no idea about reality and instead go through life as if it were still the late 1990s. At a key moment in the film, Morpheus (Laurence Fishburne) offers Neo (Keanu Reeves) either a red pill, which will enlighten him and 'pull back the curtain' or a blue pill which will maintain the ideological mask and he will return to his life as if nothing happened. Neo takes the red pill and is now free to see reality for what it is, though he soon learns how to reenter the Matrix to work towards its destruction. This "demasking" as Slavoj Žižek puts it,[41] misses just how powerful ideology can be and how often real resistance never materializes. Simply knowing that ideology is not synonymous with reality does not eradicate the ideology. If anything, pulling back the curtain can reinforce and help reproduce the ideology. "They know very well how things really are, but still they are doing it as if they did not know. The illusion is therefore double: it consists in overlooking the illusion which is

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structuring our real, effective relationship to reality. And this overlooked, unconscious illusion is what may be called the *ideological fantasy*."[42] So even if we can see through the illusion of ideology, this ironic distance to ideology that acknowledges the 'curtain' or 'program' thus allows one to still operate within the ideological framework.

The real move, then, is to work to expose the ideology at hand, but also to not slip into an ironic distance that works against making real changes for those negatively affected by that ideology. The ideology of American automobility, however, has yet to be fully exposed.

Automobility, American and Otherwise

Automobility is a rather loaded term, especially when one adds American to the front. In what follows, I will define American automobility as the cultural, social, and technical aspects of the predominant method of autonomous movement within the distinct relations of power of the United States from the late nineteenth century to the present. In simpler terms, we are looking at the material and ideological ways in which individual Americans move. Automobility need not be restricted to the automobile, but the automobile is clearly the dominant form of personal transportation in the United States. I take the prefix American from Cotten Seiler's *Republic of Drivers: A Cultural History of Automobility in America*. While his history is focused on the United States, the term American goes beyond national borders to "signify myth, transmit ideology, and

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confer power."[43] Seiler's work is a sustained look at how the automobile was worked into everyday life in America and, he argues, destroyed a sense of community through the individualizing of drivers. Quoting Henri Lefebvre, Seiler describes a typical scene on an American interstate highway, "what I see in my window is the republic of drivers in a moment of plenitude: the drivers move freely in their sociality of 'simultaneity without exchange'; and the landscape through which they pass orders and enables their movements."[44] Not only do drivers exist without meaningful interaction with one another, the very act of driving in the United States is a Foucauldian *dispositif* of control and discipline. According to Ann Stoler, Michel Foucault's concept of *dispositif* is usually translated as "social apparatus" which misses the spatiality at work. "A *dispositif*… is not a thing but the system of connections among this ensemble of arrangements."[45] The mobility inherent in driving in the United States makes such a network of power relations a bit easier to grasp. Also following Foucault, Seiler argues that American automobility exists within a specific moment in time, with a specific genealogy. Interestingly, he does not use the often cited Interstate System of 1956 as a break or rupture in American automobility, but rather a continuation that "merely dedicated a larger share of resources to a covenant with automobility that was many decades old."[46] This "covenant with automobility" was about the notion of being both modern and a free subject within the larger American society. Seiler situates the rise and peak of American automobility from 1895-1961, beginning with the advent of

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industrialization and the scientific management of the Taylorization of labor which led to a crisis of individualization. While Seiler is a post-structuralist in the sense of the individual being an invention during the Enlightenment, he sees the concept of a *lack* of individualization as a moment in American history that led to the development of automobility.[47] The robotic, scientific motions disciplining workers did not fully quash the individual and the concept saw a resurgence in the 1920s and again at the start of the Cold War. Automobility allowed America to recapture a sense of masculinity and individualism while still promoting industrial economic growth. Roads were built and cars were sold in terms of economic growth, national defense, and as a means to connect the country. Masculinity and individualism were simply "common sense" outcomes of an autonomously mobile population.[48] Automobility was made natural within networks of Foucauldian power in both the discourse and materiality of the automobile. Seiler claims that "automobility comprises a 'multilinear ensemble' of commodities, bodies of knowledge, laws, techniques, institutions, environments, nodes of capital, sensibilities, and modes of perception."[49] Automobility is clearly a white, middle to upper class, male apparatus, though Seiler examines other groups existing in American automobility of the first half of the twentieth century. Both women and African Americans saw automobility as a means to independence and freedom, but Seiler argues that through driving these individuals were made subjects of the dominant ideology. Women using automobiles were seen as necessary to reproducing a

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domestic capitalism, yet they were working within masculine spaces of the car and road.[50] African American motorists faced racial injustices on the highways, which they attempted to mitigate with guidebooks like *Travelguide (Vacation & Recreation Without Humiliation)* and *The Negro Motorist Green Book.* Seiler argues that while automobility did not provide access to a non-racial subjectivity as some had hoped, the development of the Interstate System aided in escaping the Jim Crow laws of the South.[51] Further, the subcultures of automobility like low-riders should not be seen as a resistance to automobility, but rather something like Raymond Williams' "alternative" inflections of "the dominant hegemonic practice."[52]

While I agree with Seiler's rise of American automobility, placing its zenith in 1961 misses the events of the late twentieth and early twenty-first centuries that increased an American reliance on automobility despite clear environmental concerns. The OPEC energy crisis of the 1970s was a moment that should have destroyed American automobility had it peaked a decade prior. The cutoff of oil from the OPEC countries led to higher costs and rationing. Such a moment of danger could have led the American public to discuss the merits of continued individual mobility; rather we bought smaller, more efficient cars until the oil flowed and the price went back down. Fuel economy standards born of the OPEC crisis, as well as hybrid, fuel cell, and electric technologies seen as necessary for a warming climate show how we refuse to abandon the automobile, but rather try to use it to fix our environment. Elon Musk just launched

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a Tesla automobile into space; how could we have peaked over a half-century ago? In what follows, I will be arguing that American automobility's peak has yet to arrive.

If we work from the assumption that American automobility is in fact an example of a Foucauldian *dispositif*, and I think that is a good starting point, more care must be given to the subjugation of the American driver. In *Discipline and Punish*, Foucault studies the *dispositif* at the site of the body; subjects are made through repetitive movements and surveillance.[53] Seiler argues that driving is the practice that makes the subject, yet he spends most of his work on the construction of an ideology that justified producing the automobility *dispositif*.[54] To be fair, invoking Foucault to study ideology would appear to be doomed from the start; Foucault himself shot down the validity of ideology as a concept.[55] I think what must be done is to connect the material existence of a networked apparatus of power such as American automobility to how such power relations can be accepted within a subject's mind. If I know that automobility is bad for my health, the environment, my personal finances, and so on, why do I still submit to it? The answer must lie in ideology.

American automobility is in fact an ideology. More than simply a means for traveling from point A to point B, American automobility has become a means for interpreting the world. Again, returning to Althusser and Marx, ideology is "the system of ideas and representations which dominate the mind of a [hu]man or a social group."[56] As will be shown throughout this book, the use of an individual automobile

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for mobility has become the common sense means to travel for those subjects of American automobility. The car as the best tool for the job is one component of this ideology, but it does not directly translate into an example of ecomobility. Automobility is at its most natural when it becomes the *only* way to travel through a specific ecosystem.

In Nicolas Winding Refn's 2011 film, *Drive*, cars are more than objects of desire in the film. The driver (Ryan Gosling) is a Hollywood stunt driver, a mechanic, and an incredibly competent getaway driver. He understands cars and drives them with a skill well beyond the average motorist. Even Gosling's (intentionally) robotic performance suggests a connection with the machines different from one held by the average motorist. The cars themselves are full of muscle; the sound of the revving and shifting engines evokes the thrill of machine-assisted speed. It would be easy to point to such a film as an example of ecomobility, but the cars never transcend the role of a tool for movement. The automobile is a tool for earning money, for impressing a woman and her son, for exacting revenge, but we are always aware that it is a tool. The same plot could exist while replacing cars and driving within another skill that could assist criminals, like computers and hacking. The fact that we are always aware of the automobiles prevents them from being made natural, and thus from reinforcing ideology. This is not a failure of the film; *Drive* simply isn't that kind of film. Despite the exciting car chases and getaways, *Drive* does not reproduce the ideology of American

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automobility. We may enjoy the loud engines and fantasize about driving with such competence, but we are not subjugated through such a film.

The original *The Karate Kid* is a wonderful example of how film contributes to the production of American automobility's subjects, as well as how certain mobilities are necessary for certain environments. The film, on the surface, tells the story of young Daniel LaRusso (Ralph Macchio) who learns Karate from the wise Mr. Miyagi (Pat Morita) in order to fit into his new home in Southern California, stop the bullies, and get the girl. The martial arts, while entertaining, are not the most crucial aspect of *The Karate Kid*, however. This is a film about a naturalized automobility in a distinctly American sense.

The film opens with Daniel LaRusso (Ralph Macchio) moving across country with his mother in their old green station wagon. Again, the car is a tool; the LaRussos could have flown or taken a train to their new Southern California home. Daniel does not yet have his driver's license, which means he either must rely on his mother to drive him from place to place or use his bicycle. The ideology exists in Daniel's bicycle, a transport mode that is deviant in the ecosystem that is the San Fernando Valley in the 1980s. I myself, as a boy living in California and watching the film when it was first released, thought that Daniel's bicycle was actually pretty cool but even my young mind knew that there were other modes of transport to which one needed to aspire.[57] The Cobra Kai bullies, who are also karate experts, ride motorcycles that are not

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explicitly stated as better than Daniel's bicycle, but are shown to be superior throughout the film. In one scene, Daniel rides his bicycle home at night when the headlights and buzzing of the motorcycles approach. Johnny, the leader of the bullies (William Zabka) is mocking Daniel for wanting to learn karate and knocks him off of a hillside so he can learn his first lesson, "how to take a fall." Daniel is humiliated, primarily because he lacks the access to an accepted mobility.

Yes, Daniel will train with Mr. Miyagi and ultimately defeat the Cobra Kai bullies in a tournament. Daniel's life really turns around, however, on his sixteenth birthday in which Miyagi gives him one of the many restored old cars he owns. Now that Daniel has a car, and a nice one at that, he gets his girlfriend back and the whole tone of the film shifts to indicate that despite his struggles, he can win the All Valley Under 18 Karate Tournament. Such a film lets slip the Gramscian common sense of American automobility which is all but invisible in a film like *The Karate Kid*. The film viewer is not meant to fixate on the mobilities of the film. While bicycles, motorcycles, and cars are connected to plot points, they are not mere tools as they are in *Drive*. The mobilities of the film are interwoven with every other aspect of Daniel's life to the point that they are taken in uncritically despite their critical importance to the greater context of the film. A point that I will return to, is that when speaking of landscape studies, Paul Groth has said of we Americans that not being able to see our landscape is like a fish not seeing the water.[58] I want to use what follows to amend Groth's claim. Not

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being able to see how we move through a landscape is akin to a fish not seeing the water. From an ideological perspective though, we must remember that we are not meant to see our mobilities; the water isn't supposed to be obvious to the fish. What happens if we start to pay attention to these mobilities?

Of course, we have been paying attention to our mobilities as the climate crisis grows more and more alarming. Fossil fuel burning machines are wrecking the climate and we must do something about this. The push to switch to electric cars appears to be finally gaining traction as I write this. But is that a good thing for the climate? Or must we tear down American automobility completely if we are to limit the ever-worsening sea-level rise, habitat loss, heat waves, and increase in hurricanes?

The real problem lies in the fact that despite the invisibility of our ideology of American automobility, our actions produce material consequences. And yet, it is that very invisibility that is preventing those in the wealthier nations of the world from doing meaningful change to cut emissions. If we are not even fully aware of how reliant we are on a driver-car assemblage to move through the world, how can we begin to fix that world?[59]

Plan of the present work

My goal with *Ecomobilities* is to expand the Anthropocene's archive by questioning how American automobilities are represented in popular films. While that

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may seem like a rather academic effort, a bit of using a microscope when a telescope is demanded, it is my contention that this is the very type of work those trying to extract the meaning of the Anthropocene should be doing. We know very well that nature and society are linked and we know that this hybrid world around us is burning. Why are we letting it burn, if not adding even more fuel to the fire? I am convinced that the answer lies in ideology. Not in a vulgar, American political sense of red state versus blue state ("those evil climate deniers!"), but in a much more subtle manner in which everyday life is made natural to the point in which we cannot even begin to envision change. We know that fossil fuel emissions are contributing to increased greenhouse gases, but we do not know just how difficult it will be to give up our automobilities as a means to combat climate change. Chapter One is a sustained exposition on my method for those interested in that kind of thing (i.e. those who enjoy plunging into Deleuzian thought), and will outline my rational behind the use of the films that follow. In short, I am following Adorno and Horkheimer's treatment of popular film as a commodity despite the artistic intent of the filmmakers.

To begin the application of this new Anthropocene archive and the layering of place, humans, and machines, Chapter Two introduces the presence of automobility, ideology, and the Anthropocene in George Miller's *Mad Max: Fury Road*. The film notably does not take place in the United States, but nonetheless represents the

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American automobility response to a climate apocalypse. Despite the very fact that cars got us into this mess, we cannot move throughout the wasteland without one.

The film was made in the twenty-first century, well within our present moment of climate awareness, but it builds on a world first envisioned in the late twentieth century. The film's titular character, Max, inhabits an apocalyptic planet of harsh landscapes and violent encounters, but can only survive such a world through the use of machines, especially automobiles. While the film has been read as a feminist resistance to a patriarchal regime of fossil fuel dependency, I explore what the film has to say about the fusion of humans and machines within specific environmental conditions. Max's world reveals a specific ecomobility; one cannot survive without moving with machines. I will also discuss the degree of human/machine fusion. What are we Anthropocene-epoch travelers? Cyborgs? Hybrids? Assemblages? Perhaps all three? Ultimately, *Fury Road* shows that automobilities need not be the cause of environmental collapse. Unchecked capitalism has led to the apocalyptic hellscape. Automobiles, specifically aggressive SUVs, play a fundamental role in how humans experience nature in *Mad Max: Fury Road*. The film thus provides an entry into thinking about how Americans use cars as part of an assemblage or hybrid to move through environments while operating within a specific ideology.

"Chapter 3: Machines Precede the Climate: The Technological Fix" focuses on the concept of the Anthropocene and the magic bullet of technology. David Harvey draws

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attention to a footnote in the first volume of Capital that he argues is Marx conceiving of an assemblage between the modes of production, technology, social relations, nature, and ideas about the world.[60] I use this chapter to question our present assemblage while also utilizing Jean Baudrillard's concepts of simulacra and simulation to build upon Fisher's *Capitalist Realism,* again, the idea that we cannot move past capitalism. Fisher speaks of "the widespread sense that not only is capitalism the only viable political and economic system, but also that it is now impossible to even *imagine* a coherent alternative to it."[61] As Fisher points out, modern films about dystopian futures often fail to think past a capitalist system. Many of these dystopian films, I argue, use a framing that treats the Earth's atmosphere as "the desert of the real."[62] I use this chapter to focus on films that depict dystopian futures, but specifically address the idea of a technological fix in addressing the problems inherent in such a world. My argument is that for the most part, these types of films reflect a greater societal idea that the machines precede the climate, in that the very machines that got us into the climate crisis will somehow get us out of it. The machines have become more real than the atmospheric conditions. Rather than look at a single film like the previous chapter, I spend time with *I Am Mother*, *Pacific Rim*, and *Snowpiercer* to show how bleak futures are addressed through the production of new technology. The films present different technological fixes that have questionable successes in each of their dystopian futures and yet, we still hold out for such a fix to our own changing climate.

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"Chapter 4: Zombies and the horror of not having a car: Apocalyptic stories as ecomobilities" addresses another kind of dystopian future. Where the previous chapter explored using machines and mobilities to address the Anthropocene, this one examines local responses to environmental disasters. Placed in the context of the COVID-19 pandemic, I explore how horror films have naturalized the need for American automobility when faced with an external threat. Further, specific ecomobilities emerge in which movement is connected to not just the landscape but themes of habitat, consanguinity, and masculinity. I first start with the zombies of *28 Days Later* which, despite their ontological threat in the film, allow director Danny Boyle to play with themes of familial relations and the putting down of roots. While never explicit in the film, American automobility is a commonsense component to surviving in this hellscape.

One need not have an explicit horror in the film to produce automobile dependent ecomobilities though. I also discuss the 2018 film *How It Ends*, which invokes both real and implied horrors that demand a cross-country road trip. A conservative masculinity is directly connected to the road trip and how one must deal with an external threat. This interweaving of automobility, masculinity, and end times shows how multiple ideological fantasies work in a Deleuzian sense to produce a very specific ontology of the near future.

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The fifth chapter, "'I Hope You Have a Big Trunk 'Cause I'm Putting my Bike in it: Alternative Transportation as a Reinforcement of Capitalism" addresses the second alternative of which McKenzie Wark speaks, the idea that the only solution to climate change is to turn back time to a pre-capitalist society. This is not exclusive of failing to imagine an alternative to capitalism. I first discuss cycling as a resistance to American automobility both in practice and as depicted in films like the *40-Year-Old Virgin* and *Pee-Wee's Big Adventure* to explore how automobile alternatives are presented as deviant. I argue against the simple binary of cycling versus the automobile and instead push for a Žižekian understanding of resistance through a read of *L.A. Story*. I then explore the Pixar film *Onward*, which laments how scientific progress has eradicated the idea of magic, all the while using the automobility of a van to grasp that past sense of wonder. Even in trying to envision a simpler past, we cannot move past American automobility.

I then conclude this work and discuss how we move forward. What is most important in the connection between the automobile and the Anthropocene is the work being done by the assemblage of human, machine, and environment, as well as the ideological work at play. American automobility and capitalism are inextricably linked which begs the question as to whether we can, should, or must, envision the end of the personal car.

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For those looking for a clear excoriation of the American automobile or a romantic look at a time when going for a drive had an innocence to it, I am sorry. Obviously, with what we know about fossil fuel emissions and their connection to the climate crisis, one cannot (or at least, should not) romanticize the automobile. And yet, I will admit that I find myself unable to completely eschew such a form of mobility. Whether I am out working on my Jeep, talking to one of my kids about learning to drive, or enjoying a film like *Ford v. Ferrari*, I am in American automobility's grasp. Its ideological hold is strong, and these days in the midst of the COVID-19 pandemic, I find it easier to imagine the end of the world than the end of driving a car.

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[1] World Meteorological Organization, "New climate predictions increase likelihood of temporarily reaching 1.5°C in next 5 years," May 27, 2021, https://public.wmo.int/en/media/press-release/new-climate-predictions-increase-likelihood-of-temporarily-reaching-15-°c-next-5

[2] Intergovernmental Panel on Climate Change, "Summary for Policy Makers," in *Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty,* edited by V. Masson-Delmotte, P. Zhai, H.-O. Pörtner, D. Roberts, J. Skea, P.R. Shukla, A. Pirani, W. Moufouma-Okia, C. Péan, R. Pidcock, S. Connors, J.B.R. Matthews, Y. Chen, X. Zhou, M.I. Gomis, E. Lonnoy, T. Maycock, M. Tignor, and T. Waterfield, https://www.ipcc.ch/site/assets/uploads/sites/2/2019/05/SR15_SPM_version_report_HR.pdf , 7.

[3] Rebecca Hersher, "Earth is Barreling Toward 1.5 Degrees Celsius of Warming, Scientists Warn," *National Public Radio*, May 26, 2021. https://www.npr.org/2021/05/26/1000465487/earth-is-barreling-toward-1-5-degrees-celsius-of-warming-scientists-warn; Zander S. Venter, Kristin Aunan, Sourangsu Chowdhury, and Jos Leleiveld, "COVID-19 Lockdowns Cause Global Air Pollution Declines," *Proceedings of the National Academy of Sciences* 117, no. 32 (August 11, 2020):18984-18990.

[4] Richard Grove, *Green Imperialism: Colonial Expansion, Tropical Island Edens, and the Origins of Environmentalism, 1600-1860* (Cambridge: Cambridge University Press, 1995), 166.

[5] Spencer R. Weart, *The Discovery of Global Warming, Revised and Expanded Edition* (Cambridge: Harvard University Press, 2008), 2-3.
[6] Weart, *Discovery*, 7.
[7] Paul J. Crutzen and Eugene F. Stoermer, "The 'Anthropocene'" *Global Change Newsletter*, No, 41 (2000), 17.
[8] One exception comes from William Ruddiman who argues for significant anthropogenic climate change happening roughly 5,000 years ago with advances in agriculture. William F. Ruddiman, "The Anthropogenic Greenhous Era Began Thousands of Years Ago" *Climatic Change* No. 61 (2003): 261-293.
[9] Intergovernmental Panel on Climate Change (IPCC), "FAQ Chapter 1," https://www.ipcc.ch/sr15/faq/faq-chapter-1/
[10] Andreas Malm, *Fossil Capital: The Rise of Steam Power and the Roots of Global Warming* (Lodon: Verso, 2016), 391
[11] Malm, Fossil, 391.
[12] Malm, Fossil, 391, his emphasis.
[13] Jason W. Moore, *Capitalism in the Web of Life: Ecology and the Accumulation of Capital* (London: Verso: 2015), 4
[14] Moore, *Capitalism*, 30, his emphasis.
[15] Moore, *Capitalism*, 291, his emphasis.
[16] Neil Smith, *Uneven Development: Nature, Capital, and the Production of Space* (Athens: University of Georgia Press, 2008), 68.
[17] Karl Marx, *Capital: A Critique of Political Economy, Volume One* (London: Penguin Books, 1990 [1867]), 273.
[18] Marx, *Capital Vol 1*, 290.
[19] Moore, *Capitalism*, 303.
[20] Jason W. Moore "The Capitalocene, Part I: On the Nature and Origins of Our Ecological Crisis." *The Journal of Peasant Studies* 44, no. 3 (2017): 596.
[21] Moore, *Capitalism*, 303.
[22] Joel Wainwright and Geoff Mann, *Climate Leviathan: A Political Theory of Our Planetary Future* (London: Verso, 2018), ix.
[23] Bruno Latour, *Facing Gaia: Eight Lectures on the New Climatic Regime* (Cambridge: Polity Press, 2017), 122.
[24] Mark Fisher, *Capitalist Realism: Is There No Alternative?* (Winchester, UK: Zero Books, 2009).
[25] McKenzie Wark, *Molecular Red: Theory for the Anthropocene* (London: Verso: 2016), xxi.
[26] Wark, *Molecular*, xxi.
[27] Jedediah Purdy, After Nature: A Politics for the Anthropocene (Cambridge: Harvard University Press, 2015), 5.
[28] Moore, *Capitalism*; Smith, *Uneven*; Latour, *Facing Gaia*; Donna J. Haraway, Staying with the Trouble: Making Kin in the Chthulucene (Durham: Duke University Press, 2016)
[29] Purdy, *After Nature*, 15.
[30] Althusser, "Ideology," 120
[31] Smith, *Uneven*, 28.
[32] Marx and Engels, "The German Ideology," 154-5.
[33] Marx and Engels, "The German Ideology," 172, their emphasis.
[34] Althusser, "Ideology," 125
[35] Althusser, "Ideology," 122, his emphasis
[36] Althusser, "Ideology," 126
[37] Althusser, "Ideology," 128
[38] Althusser, "Ideology," 135.

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[39] Stuart Hall, "Signification, Representation, Ideology: Althusser and the Post-Structuralist Debates" *Critical Studies in Mass Communication* 2, no. 2 (June 1985), 100, his emphasis
[40] Hall, "Signification" 105.
[41] Slavoj Žižek, *The Sublime Object of Ideology* (London: Verso, 2008 [1989]), 25.
[42] Žižek, *Sublime*, 30, his emphasis.
[43] Cotten Sieler, *Republic of Drivers: A Cultural History of Automobility in America* (Chicago: The University of Chicago Press, 2008), 7.
[44] Seiler, *Republic*, 147.
[45] Ann Laura Stoler, *Duress: Imperial Durabilities in Our Times*, (Durham: Duke University Press, 2016), 110.
[46] Seiler, *Republic*, 2
[47] Seiler, *Republic*, 29
[48] Seiler, *Republic*, 90
[49] Seiler *Republic*, 6
[50] Seiler, *Republic*, 58
[51] Seiler, *Republic*, 128
[52] Seiler, *Republic*, 10
[53] Michel Foucault, *Discipline and Punish: The Birth of the Prison* (New York: Vintage, 1995 [1975]), 23-24.
[54] Seiler, *Republic*, 35
[55] Michel Foucault, "Truth and Power," in *Power/Knowledge: Selected Interviews & Other Writings 1972-1977*, edited by Colin Gordon (New York: Vintage Books, 1980 [1977], 118.
[56] Althusser, 120
[57] Full disclosure, I first saw the film with my dojo. I was six and ditched my mom to sit next to my sensei. The context of seeing a film is important to ideological reproduction.
[58] Paul Groth, "Frameworks for Cultural Landscape Study," in Understanding Ordinary Landscapes, edited by Paul Groth and Todd W. Bressi (New Haven: Yale University Press, 1997), 1.
[59] Tim Dant, "The Driver-car." *Theory, Culture, & Society* 21, no. 4-5 (2004): 61-79.
[60] David Harvey, *A Companion to Marx's Capital: The Complete Edition* (London: Verso: 2018 [2010]), 191-214; Karl Marx, *Capital: A Critique of Political Economy, Volume One* (London: Penguin Books, 1990 [1867]), 493-494.
[61] Fisher, *Capitalist Realism*, 2, his emphasis.
[62] Slavoj Žižek, *Welcome to the Desert of the Real* (London: Verso, 2002), 15.

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