THE COLONIAL MACHINE: MACHINES, POWER, AND LAND

INTRODUCTION

In my first year of college, I took *Politics, Religion, and the State*, in which we discussed various conceptions of the state. Although I found the discourse compelling and relevant to developing my concentration, definitions of the state, sovereignty, and the political were difficult to grasp and felt like a maze of abstractions and unfamiliar historical contexts. Coming from a STEM background, these concepts were initially too foreign for comfort. The same semester, I took *Big Data Ethics and Internet Epistemology*, in which I became aware of the Internet as a space of its own that operates with a different dimensionality. In our modern context, in which digital technologies are ubiquitous – on our streets, in our homes, and in our hands – the way in which we think and experience the world has become inextricably linked to these technologies. Consequently, I became concerned about how technology affects our social realities as well as how it integrates with existing infrastructures of power. This concern resonated with questions that still lingered for me about the state and sovereignty: how does power affect and control people from a distance? In other words, how does power replicate, even amplify, itself throughout the land?

To build an image and vocabulary of the state in a more contemporary and thus accessible context, I looked to urban studies to analyze the city as a microcosm and imagination of the state's construction. This is where I began to develop an understanding of major social technologies – such as race, gender, and class – and how they intersect with the infrastructure of the city. Specifically, I was drawn to the mechanical elements of the city – buildings,¹ cars, dishwashers,² clocks – through which I conceived my vision of a city as a complex assemblage of machinery and technology that serves as an extended network of the state. Finally, in my last year, I took the courses *Life Among the Machines* and *How Human? Cyborgs, Robots, and Artificial Intelligence*, which introduced me to the field of human-

¹ Murphy, Michelle. *Sick Building Syndrome and the Problem of Uncertainty: Environmental Politics, Technoscience and Women Workers*. Duke University Press, 2006.

² Cowan, Ruth Schwartz. *More Work for Mother: The Ironies of Household Technology from the Open Hearth to the Microwave*. Basic Books, 2008.

machine interaction and the ideals of technocratic governance. Here, I dug deeper into how the increasingly automated and artificial environment of the city affected people's understanding of the self. I found that the modern conception of the self was highly reliant on that of machines, particularly with respect to labor and its standards in terms of prioritizing output, reducing error and increasing efficiency. In this sense, machines have become a significant vessel for generating power as well as an omnipresent channel through which power can be translated to the masses.

However, I found that the field of human-machine interaction lacked a solid synthesis with land. This is strange because land is literally the basis on which we live and create. Nature is like the original infrastructure, inasmuch as infrastructures are "matter that enable the movement of other matter" and "objects that create grounds on which other objects operate."³ The oddity of this disconnect became clear through my studies of settler colonialism and indigeneity. I began to draw parallels between how people relate to machines in the city and how indigenous communities have been dispossessed from the land, focusing in particular on a deep-rooted mind-body rupture that has created a blockage in people's ability not only to self-regulate but also to manifest their desires outside of settler colonial imperatives. My aim in the remainder of my Rationale is to present an argument for an expansion of the human-machine interaction to establish land as a core, essential element, rather than an afterthought. In claiming that land is a critical site of engagement, I hope to develop a language within the study of technology and society that centers indigeneity and decolonization.

THE POWER OF THE STATE

A critical node of power in our world is the state. Hobbes notes that the state has the power to override the natural state of man (one of unmitigated self-interest and struggle for survival). It is, for Hobbes, *lex naturalis* or the "Law of Nature" itself that obligates human beings to renounce "the liberty each man hath to use his own power as he will himself for the preservation of his own nature."⁴ The renunciation of man's natural right is key to the fulfillment of its purpose, the preservation of each individual. Aristotle,

³ Larkin, Brian. "The Politics and Poetics of Infrastructure." *Annual Review of Anthropology*, vol. 42, no. 1, 2013, pp. 327–343, https://doi.org/10.1146/annurev-anthro-092412-155522.

⁴ Mairet, Gérard. Léviathan, Hobbes. Ellipses, 2000.

another foundational theorist of the state, also affirms, although in a somewhat different key, that it is for the best that the individual's purposes be subordinate to those of the state. "For even if the end is the same for a single man and for a state, that of the state," he says, "seems [...] something greater and more complete whether to attain or to preserve," and "though it is worth while to attain the end merely for one man, it is finer and more godlike to attain it for a nation or for city-states."⁵ The state is both a protector and an ideal. People regard laws with respect and adhere to them because of the promise that the state, their enforcer, will keep us safe and promote the collective's best interests. However, adherence to law has also been linked to a sense of moral goodness, and its violation to a sense of moral pravity. For example, the U.S. carceral state processes people into prisons, physically removing them and socially outcasting them as criminals and labeling them as dirty, undesirable, and diseased.⁶ The project of hyperincarceration capitalizes on this to uphold the perception of the law as moral authority rather than a mediator, a technology, and does so largely through the sacrifice of Black bodies on the altar of the state's moral sanctity. This conflation of law with morality acts as a precursor to the state's use of law as an enforcer of hierarchy, serving as justification for an uneven distribution of power. Today, knowledge of the state's abuse of power to incarcerate Black bodies is publicly accessible through documentaries like 13th or books like The New Jim Crow. Yet despite this knowledge, despite the broken promise of providing security for all, the state still maintains its sovereignty. How?

To answer this question I look to the logic of settler colonialism. Settler colonialism departs from traditional colonialism as its primary source of power is the control of land, as opposed to labor or resources. Traditional colonialism is linear; it functions by extracting natural and human resources for the benefit of the metropole. Settler colonialism is circular; the state acquires land to settle permanently and on which to establish new communities, claiming the labor that resides on and the resources that reside in the land as its own. The effects of this circular structure are comparatively more resilient because they not only dispossess indigenous communities, but also forcibly incorporate them into the state's economic

⁵ Aristotle, et al. Aristotle: Nicomachean Ethics. Oxford University Press, 2002.

⁶ Hyperincarceration piece – Lois Wacquant

infrastructure.⁷ Furthermore, in dispossessing people from their land, colonists dissolve established communities down to the individual, leaving them more vulnerable to the influence of the colonizing power. This gives the state the opportunity to replace land with institutions, compelling people either to join or to perish. Within these institutions, people are subject to the infrastructure designed and constructed for the benefit of the colonizer, whose imperatives over time are internalized by and incorporated into the lived reality of its subjects.

The state's control of land is largely regulated through geography, which is a tool that enforces Western supremacy, not only by establishing that the world must be mapped in order to be seen, but also by guiding what we see, how we see, and "disciplining us into seeing (and knowing) mapped space as racialized place."8 Moreover, the language of geography relates the perception of the land with our perception of ourselves and others. Loperena notes that the "language of geographic inquiry became the language of Enlightenment knowledge production itself," such as "charting fields of knowledge; exploring the *terrain* of the human mind; *mapping* the stages of mankind," thus providing "the material knowledge of colonial exploration."9 Global distinctions such as the "West" and the "Orient" serve to "other" the non-West (particularly exoticizing them); "First World" and "Third World" establishes hierarchy in terms of economic power; and "developed" and "undeveloped" uses economic development as a measure of progress and civilization. Mapping is therefore a method of exercising power through knowledge production. Thus, the city is the manifestation of the state's mapping of space, reflecting its dominance and superiority in its organization of land and people. Because the city is regarded as the epitome of civilization, anything else can be considered less civilized, even savage. Moreover, the labor that "comes with" undeveloped land must also be less intelligent, and thus more disposable. The city, therefore, is a core site of understanding the state's design and imagination of control.

THE CITY, MACHINES, AND THE SELF

⁹ Ibid.

⁷ Glenn, Evelyn Nakano. "Settler colonialism as structure." *Sociology of Race and Ethnicity*, vol. 1, no. 1, 2015, pp. 52–72, https://doi.org/10.1177/2332649214560440.

⁸ Loperena, Christopher A. "Settler violence?: Race and emergent frontiers of progress in Honduras." *American Quarterly*, vol. 69, no. 4, 2017, pp. 801–807, https://doi.org/10.1353/aq.2017.0066.



Figure 1. Images from *Metropolis* (1927)¹⁰¹¹¹²

The construction of the modern city is not only made possible by machines but is also modeled after them. Transportation relies on highways (accommodating vehicles), sidewalks (connecting buildings), and train tracks (making accessible industry and labor). In this way, we can see that the modern city is not a reflection of people, but a reflection of machines. Yet the modern city has become a significant mold of our consciousness and conception of the self. Metropolis, an influential 1927 German sci-fi film, provides several powerful images that reflect this through the architecture of the city. In the first image in Figure 1, we can see that the infrastructure of the city is divided among the workmen who reside underground, the machines placed above them, and the capitalists who occupy the above-ground. The vertical arrangement symbolizes a hierarchy that exists in our actual cities, where de facto segregation separates those who are afforded access to the luxuries and amenities of modernization and protected from its disorders from others who are capitalized on for the maintenance of modernization and exposed to the greatest violence of cities. This creates a confusing sense of desire to escape the machines but also to access the leisures created by them. This image is also symbolic of the infrastructure of the state, in which machines serve as a protective barrier between the capitalists and the workmen. The workmen's lives revolve around laboring for the machines, represented by the image of a workman's body being contorted by the arms of the clock. This image is symbolic of how the distortion of time can physically affect people, and thus create a sense that their bodies are not their own but rather an extension of the machines. Lastly, the architecture of Metropolis presents an absence of nature of land. Only in the capitalist's city is there a

¹⁰ Lucarelli, Fosco. *Metropolis architecture*. 15 Aug. 2012. *Socks*, https://socks-studio.com/2012/08/15/about-metropolis/.

¹¹ Von Harbou, Horst. *Metropolis Clock Scene*. 1927. Stiftung Deutsche Kinemathek, https://www.akg-images.com/archive/-2UMDHUNDRX21.html.

¹² Lang, Fritz, director. *Metropolis*.

gated space, called the "Eternal Garden," where nature is preserved. The third image shows a scene that points to the objectification and eroticization of nature through the decorated women whose role is to entertain the "elite masters," men who are afforded access to the garden. Access to nature comes to represent leisure, enjoyment, and escape from the city – all of which are denied to the workmen, their existence restricted to the function of laboring for the machines. Collectively, these images show how the workmen's consciousness and sense of self is restricted to the machines, which they not only must serve, but to the violence of which they are also subjected. Furthermore, these images encapsulate how the machine plays a critical role in translating the power of the capitalist state by replacing people's attachments to land. This serves to drive machine consciousness deeper into people's psyche while pushing our consciousness of land closer to extinction. In this way, the world created by machines comes to dominate our idea of what is human and in turn what people are worth.

It is important to note, however, that a "world created by machines" is actually a false reality. Machines do not have the capacity for world-building outside of what they are designed and programmed to do by humans. Nevertheless, the idea of a world created by machines still has a strong hold on us, and one grounded in the notion of surrogate humanity. Atanasoski and Vora propose that the ultimate potential of technology is defined by the techno-liberalist notion that "specific types of human functions and human workers" are replaceable.¹³ Capital can invisibilize laborers by replacing and discarding them, instead investing in machines which automate the labor process. This creates a real system in which machines become a surrogate for human laborers and are deemed superior in their efficiency and consistency. This also benefits capital because machines don't come with moral contracts and consequences, and thus their use in lieu of human labor fosters a more unresisting environment in which it can operate.

¹³ Atanasoski, Neda, and Kalindi Vora. *Surrogate Humanity: Race, Robots, and the Politics of Technological Futures*. Duke University Press, 2019.



Figure 2. Images of early-modern medicalization of the body¹⁴¹⁵

Secondly, the distinct use of "human" and "people" is also deliberate, as they are parallel terms but not synonymous. This nuance is critical in my argument, as the "human" represents a more scientific conception of people classified as *homo sapiens*. The "human," therefore, contains a sense of membership within a pre-defined group. Here, mapping returns as the production of knowledge of what is human in medical contexts. Western investigations of the body largely center on measurements, proportions, and comparisons, which are then taken as inherent indicators of human qualities. Figure 2 gives an example of breast shape being taxonomized as an evaluation of beauty, while Figure 3 is the famous Vitruvian Man that presents the perfection of Man in terms of geometric proportion. These standards of beauty and perfection are representative of guiding ideals of achievement, particularly of external, quantifiable characteristics. These figures also represent the contrasting intensity with which male and female bodies are dissected. Specifically, female sex organs bear an unbalanced weight of classification and, in turn, scrutiny. The mapping and medicalization of the body becomes an objectification of the body, which in turn translates into an objectification of the self into a fixed identity based on external validations. This works to disembody the human from the totality of its intelligence and break the body into parts.

¹⁴ Hovenden, Fiona, et al. "Taxonomy for Human Beings." *The Gendered Cyborg a Reader*, Taylor and Francis, London, 2013, pp. 1–73.

¹⁵ Da Vinci, Leonardo. *Vitruvian Man. Leonardo Da Vinci Paintings, Drawings, Quotes, Biography*, https://www.leonardodavinci.net/the-vitruvian-man.jsp#google_vignette.

Breaking the flow of communication of the body also serves to disrupt connection between people, as people are no longer seen as people but as a collection of parts and functions. Thus, disembodiment is a fundamental project of the state that promotes the idea that the self is incomplete and therefore is reliant on the state, rather than land or community, to complete it. In order to determine the standard of what is human, people are deconstructed into parts and put back together, much like a machine, and what is "human" understood to be something predetermined, static, and absolute. The human, therefore, serves to erase the nature of the social, in which people are mobile, changing, and porous beings.

What I focus on in my concentration, however, is how, in particular, these conceptions of what is human, which have been intimately tied to the sciences, intersect with machines. Though machines are tools, our fascination with their movements has created a tendency to look towards them as a way of seeing ourselves. The concept of artificial life, for example, can be observed already in the mid-eighteenth century with the *Defecating Duck*, which, Jessica Riskin explains, was a philosophical experiment meant to explore "which aspects of living creatures could be reproduced in machinery, and to what degree, and what such reproductions might reveal about their natural subjects."¹⁶ The development of automata both responded to and, no doubt, exacerbated anxiety around "the problem of whether human and animal functions were essentially mechanical."¹⁷ Descartes greatly influenced Western conceptions of the human-machine relationship when he imagined the human body as merely machine, however complex, and the mind as something fundamentally different from the body, from matter – something disembodied. These conceptions of humans as machines or modeled after machines indicate some desire to discover our nature and in turn expand the imagination of our potential. Machines, therefore, have a significant role in determining the environmental conditions under which people can imagine themselves. Modern theories of human relations to machines have also predominantly followed the Cartesian line of thought. One significantly different theory, however, is the Extended Mind Hypothesis, introduced by David Chalmers, which advocates for an active externalism, that is, the idea that the "human organism is linked with an external entity in a two-way interaction, creating a coupled system that can be seen as a cognitive system

¹⁶ Riskin, Jessica. "The defecating duck, or, the ambiguous origins of Artificial Life." *Critical Inquiry*, vol. 29, no. 4, 2003, pp. 599–633, https://doi.org/10.1086/377722.

in its own right."¹⁸ The Extended Mind Hypothesis specifically challenges the opposition of mind and extension inherited from Descartes, and argues for the "active role of the environment in driving cognitive processes."¹⁹ In operating machines, we are extending our mind through a separate corporeal body. This blurring of the lines between our minds and the material world, specifically machines, offers insight into the boundaries of our humanity.

CENTERING EMBODIMENT AND LAND

Current scholarship on the human-machine relationship has been expanding through a feminist technoscience lens in which the mind and body are both considered critical sites of the extension of machines. Donna Haraway's "Cyborg Manifesto," for example, uses the image of the cyborg to argue for an active role determining our own identity through affinity rather than what is prescribed or ascribed to us – even what seems most natural to identify with, such as the human. The cyborg, for Haraway, "is a condensed image of both imagination and material reality, the two joined centers structuring any possibility of historical transformation," where imagination informs our material reality and our material reality is a significant driver of the potentials of our imagination.²⁰ Her post-humanist perspective allows us to theorize beyond the designing of social systems by disassembling and reassembling the human in order to engineer the ideal environment. Rather, she implies that this only leads to the world being systematized and operationalized to the point where we no longer are what we are but become statistics, populations, and translations of ourselves. By embodying its material reality and fully acknowledging its present being, the cyborg can fluidly move through the world instead of being stuck in the functions afforded to it.

But what if Haraway's cyborg theory was used in relation to humans and land instead of humans and machines? Or machines and land? Haraway's cyborg effectively establishes the mind-body connection, but a more direct connection between the cyborg and land is necessary, as land is the source

¹⁸ Clark, Andy, and David J. Chalmers. "The extended mind." *The Extended Mind*, 2010, pp. 26–42, https://doi.org/ 10.7551/mitpress/9780262014038.003.0002.

¹⁹ Ibid.

²⁰ Haraway, Donna J. "A cyborg manifesto." *Manifestly Haraway*, 2016, pp. 3–90, https://doi.org/10.5749/ minnesota/9780816650477.003.0001.

of all mechanical bodies. This elision of land is reflective of the fact that machines and nature are often put in opposition to one another through the notion of artificiality. However, the experience of machines always struck me with an awe similar to that with which I am struck by nature. This feeling is what led me to relate the human relationship to machines to that of nature. It then became important to bridge the disconnect between machines and nature to generate a paradigm shift in our understanding of machines as an extension of nature, rather than an entirely alien force. Furthermore, I found my background in STEM significantly affected the depth to which I could imagine the self down to the atomic scale. This background knowledge was critical for my motivation to create not only a more inclusive understanding but a centering of land and the elements. And what helped me connect all of these elements was the study of indigeneity.

Leslie Marmon Silko links the cyclical nature of humans, machines, and land in her book *Ceremony*. She tells a story of whiteness in which it was

the white people who had nothing; it was the white people who were suffering as thieves do, never able to forget that their pride was wrapped in something stolen, something that had never been, and could never be, theirs [...] only a few people knew that the lie was destroying the white people faster than it was destroying Indian people. But the effects were hidden, evidence only in the sterility of their art, which continues to feed off the vitality of other cultures, and in the dissolution of their consciousness into dead objects: the plastic and neon, the concrete and steel. Hollow and lifeless as witchery clay figure.²¹

The phrase "in the dissolution of their consciousness into dead objects: the plastic and neon, the concrete and steel," in particular, alludes to the extraction of resources from the land, stripping it of all its life – a ceremony of settler colonialism.²² The dissociation from land makes it easier for the state to hide the effects of their denial and to compartmentalize trauma into the bodies of others until they are made obsolete. This ceremony materializes into a world of machines where people's consciousness is geared no longer towards life but towards death. This path towards self-destruction can be seen most prominently in

²¹ Silko, Leslie Marmon. Ceremony. Random House, 1994.

the nuclear bomb as well as public anxieties surrounding environmental disasters, killer robots, and Matrix-like realities (virtual reality).

Machines, however, are not inherently self-destructive. Rather, it is the relation between the settler colonial state and the land which trains settler colonial imperatives into machine intelligence. The machines automate and create momentum for the settler colonial apparatus, making it stronger and harder to resist. Nevertheless, machines can also be a tool for insurgency. Co-opting the settler state's use of machines, not solely by extending our cognitive capabilities, but also physically embodying machine intelligence for our own desires, brings us closer to the greater source of power which is land. In Settler Colonialism and Black/Indigenous Resistances throughout Abya Yala (the Americas) and Beyond, the question was posed: What is indigeneity without land? This question sends me in an existential spiral, but what gives me stabler ground is thinking in terms more personal to me - Korea. In the disappearance of Korea, what would become of Koreans? We may no longer have our land, but we have our history, culture, and identity, the memories of which are embedded in our bodies brought about by our daily practices and interaction with our environment. This evolution of our understanding of land to extend to our bodies and in turn our selves is a key to unity in the absence of land and its borders. Although the preservation and reclamation of land is still critical to our survival, in generating the strength of relations between people, machines, and land, our sense of community can no longer be so easily shaken when land is taken from us.