Future-Crafting

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 Ideas for constructing a better world go back thousands of years, yet oppression and suffering still plague our Earth. In this thesis, I explore how past conformist utopian systems failed to achieve the kinds of ‘perfect societies’ they envisioned, and inevitably led to both oppression and suffering. I examine how we can learn from the failures of those systems, and I lay out potential directions for crafting a more emancipatory, nuanced, and sustainable future.

I define conformist utopian systems as situations in which a central bureaucratic state attempts to force a model way of being onto individuals, social organization, and the environment. Often originating in naive rationalism and an implicit desire for mastery and/or subjugation of a substrate of society, these systems fundamentally rely on legibility projects. Indebted to Scott, I describe and use his conceptualization of legibility found within his book *Seeing Like a State*. Such legibility usually begins as an attempt to make people, spaces, and/or resources more easily understandable from an administrative perspective. However, these kinds of projects often develop into an attempt to reformulate the world to match an abstract schematic. These schematics tend to be based on conceptions of order and efficiency. History has shown that imposing centralized schematics onto the world can result in enormous productivity. While this usually results in prosperity for some, it too often ends up also silencing and dehumanizing large portions of the population, while also taking an immense toll on our shared planet. How can we make a road to a better future without using the suffering and oppressed as building material?

Because of our agency in constructing the future, I look toward both history and fiction to inform my thinking on potential directions to avoid. Additionally, I explore ways to discover and build an emancipatory future, one that sees our world and its residents as more than consumable resources. I describe how oversimplification and conformity are potentially disastrous goals, ones commonly pushed in the name of creating a better future by central governments of the past and present. This ties into projects of enclosure, in which arbitrary boundaries are built to separate people. Such boundaries can be physical (such as walls), political (such as imposition of externally decided borders), and/or social (such as the polarized political parties). Finally, I examine ways in which technology and markets are intertwined within culture and society, how these relate to conformist utopian systems, and craft humans into consumable resources. This section also explores implications of our relationships with technology and society, and ways to make those relationships sustainable and life-affirming.

This thesis is organized into two parts. In the first, I focus on concepts, ones which include a series of critiques on past human behaviors and mindsets. I trace how rationalist ideologies and worldviews developed into conformist schematics, and how these schematics have been implemented via central state authority. I also examine the results of this process, focusing on dehumanization, silencing, and objectification. Informed by Scott, I describe legibility construction. In the process of making people and places legible to central authorities, large swaths of detail become obfuscated or lost. Oftentimes this leads into attempts to reconstruct the territory in the image of the rationalized map. This conformist vision pays no attention to the locality, tradition, or context of the people and places being bulldozed in the process. I also draw from and analyze speculative fiction, a medium which allows the imagining of potential futures. Fiction can help inform the future and articulate failures of the past and present. In the second part, I outline my own working conception of how to move toward a more equitable and sustainable future. Rather than providing a prescriptive blueprint of how I think the world ought to operate, I instead outline general goals that I believe are worth moving towards, along with potential strategies for getting there.

The first of these goals is the construction and usage of nuanced conceptual tools, ones able to readily adapt and change along with the conditions being analyzed. Trying to view the world through a single conceptual lens or system is prone to distortion, as relevant details can easily be glossed over for the sake of oversimplification. Second is the promotion of more constructive social discourse. The world is changing fast, and as the COVID pandemic shows, new catastrophes are always at risk of emerging. We need a discourse able to engage and learn from expertise, and deftly take action. With a globalized economy and world, we as humans sink or swim together in many respects. Third is giving voice to the voiceless. Too often the local, the contextual, and the oppressed are steamrolled into conformity. This is not just a loss of culture or a loss of locality, it's also a dehumanization (a loss of humanity and of personhood). Fourth is the necessity of examining our relationship with our markets, our technology, and each other. Our markets and technology threaten to make us subservient to them, and our social connections are beset with tribalism, nationalism, prejudice, and vitriol. Our social media is beset with misinformation. Our democracy is at risk (and with it, our science). In order to achieve a healthy examination, we will have to talk to every stakeholder involved, and avoid resorting to blind faiths in markets, in ideologies, in technologies, and in traditions. With thoughtfulness, nuance, and a fair bit of effort, a better future is within our grasp.

# Part 1: Critical Concepts

## Section 1: *State-Crafting, Legibility, and Rationality*

In *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed*, James Scott explains the failings of large scale conformist utopian systems. His concepts of “state-crafting” and “legibility” help make sense of the failures of past projects, ones I am viewing as conformist utopian systems. I will first cover his notions of premodern and modern state-crafting. In essence, central government is a rather complicated affair, and a lot of information is needed to govern effectively. The premodern state is one which doesn’t have access to a series of administrative ‘technologies’, ones useful for making a country, its people, and its resources more easily comprehensible to central administrators. As these premodern states developed, such administrative tech began to be invented and spread across Europe. This laid the groundwork for large scale legibility projects.

Next, I will cover his ideas of government-sponsored legibility projects. For Scott, legibility projects attempt to make people, places, and things easily readable and understandable within the context of government administration. They are primarily motivated to solve bureaucratic problems, but often end up (intentionally or unintentionally) enforcing ways of thinking and being; and too often, ones that have massive impact for people living at ground level. Oftentimes these legibility projects contain two stages: first understanding the world, then reconstructing it. Finally, I summarize Scott’s paradigm case of Scientific Forestry, in order to see his principles in action. This links into an examination of Heidegger’s *A Question Concerning Technology*, and its notion of standing-reserve. Heidegger’s notion of standing-reserve dovetails in with legibility projects, and helps describe many examples of dehumanization and unsustainable resource extraction. Next, I explore technology and rationalism via Finn’s text *What Algorithms Want*. As our technology becomes better faster, we need to make sure we understand the direction such advances are taking us.

## Section 1a: *Governance and Administration in Premodern and Modern Statecraft*

Much of my thinking is oriented around concepts developed by Scott, so I begin with summaries of key ideas. According to Scott, a persistent struggle in governance has been processes of understanding a country’s own land and people. From natural resources to human distribution, the eyes of the state are never all-seeing. Before technologies such as census-taking, realistic cartography, resource surveying, and uniform measurement systems, trying to handle the logistics of statecraft[[1]](#footnote-0) and government-running was nightmarishly difficult, given ubiquitous state goals of defense, expansion, power maintenance, and social control. Without knowing where to chop wood, what plots to mine, how could a state efficiently facilitate the production of necessary materials? Without population statistics, demographic information, and residence information, how could a state build armies, plan cities, or tax sustainably? On this, Scott says:

“The premodern state was, in many crucial respects, partially blind; it knew precious little about its subjects, their wealth, their landholdings and yields, their location, their very identity. It lacked anything like a detailed “map” of its terrain and its people. It lacked, for the most part, a measure, a metric, that would allow it to “translate” what it knew into a common standard necessary for a synoptic view. As a result, its interventions were often crude and self-defeating.” (Scott 1998, p. 2)

Scott explains how this “premodern state” was fundamentally unable to conceptualize vast swaths of the lands and people they were trying to administer. Because of this, country leaders were forced to make guesses[[2]](#footnote-1) on all kinds of metrics, and were quite often quite incorrect. This led to unstable and problematic taxation, inequitable distribution of resources, graft, and all kinds of other headaches for government administrations. Socio-governmental processes within the premodern state needed to advance in order to allow for items as seemingly simple as the phonebook or city map[[3]](#footnote-2). On the creation of the “modern state”, Scott says:

“Suddenly, processes as disparate as the creation of permanent last names, the standardization of weights and measures,the establishment of cadastral surveys and the population registers, the invention of freehold tenure, the standardization of language and legal discourse, the design of cities, and the organization of transportation seemed comprehensible as attempts at legibility and simplification. In each case, officials took exceptionally complex, illegible, and local social practices such as land tenure customs or naming customs, and created a standard grid whereby it could be centrally recorded and monitored.” (Ibid.)

While these socio-governmental legibility practices advanced in piecemeal, being showcased individually in some parts of the world far more than others, their birth ushered in a new era of state construction. Much like the computer or the gun, legibility projects are not bad in themselves. Rather, it is their implementation and context that determines whether their impacts end up being positive or negative. A quality census is valuable for reformers to understand the extent of racism and inequity for the sake of improving the world, but it is also valuable for bigots attempting to undertake an ethnic genocide.

## Section 1b: *Legibility Projects- Understanding and Mastery*

According to Scott, one of the core goals of any competent country planner is to attain accurate information about the goings on within their borders. This information is critical for informing the creation of new state projects and activities (taxation schemas, construction facilitation, resource exploitation, etc.), as well as examining the success of projects currently in progress. Scott identifies a key part of this process as legibility-creation (Scott 1998, p. 3). Within a single country there could be multiple languages, multiple measurement systems, moving population, unmapped natural resources, and obscure and local land ownership arrangements. Trying to put all of these onto a singular map or document would be nightmarish, and they would become out of date as social practices changed organically. Therefore, for country planners to realize the goal of seeing the entirety of a subject on a single sheet of paper (for example, the entire demographic breakdown of the country by gender, age, occupation, ethnicity, etc.) they must create a synoptic view-from-above.

Based on Scott's work, legibility projects function, at least conceptually, in two stages. First, there is usually a stage of understanding during which a government attempts to survey a particular factor. An example of this first stage would be an attempt to map out a country’s land ownership for taxation purposes. As Scott describes, a state could try to understand the entirety of tax relationships within their borders, and figure out precisely who owes what tax according to the present law. Because traditions and social norms varied so much from place to place, as each village and locale developed within a particular local history, trying to understand the land use schemas of every village in one’s country was quite a task. Scott explains that to succeed in a synoptic map of present land ownership, administrators would have to go out and survey each village and learn each different local land use system. These locals could use their power over this mapping process in order to influence results in their favor, and the simple fact that they have input during this process acts to decentralize the balance of power.

A thorn in the side of the administrative state was often the inherent confusion caused by local situations themselves. Land could be without an official owner/deed, or could even be owned by multiple people at once. Peasant run communal land was a common phenomenon. Even if a complete cadastral map (inclusive of all village customs) were achieved, the final product would be such a wildly complicated document that it would be of little practical purpose, becoming rapidly obsolete. If an administration wanted to attain a full view over their land, they would realistically need to create some kind of uniformity. According to Scott, discontent over the effectiveness of the premodern state often led to the second stage of legibility, that of world-reconstruction.

Not content to simply map the world, country administrators often took things a step further, and attempted to rewrite and reconstruct the world itself. Using central authority, they were enabled the power of demanding a uniform system across an entire region of land.[[4]](#footnote-3) With the goal of making an entire area legible on a single map, viewable through a single conceptual lens, standardization projects began. Scott mentions how local names were recorded, standardized, and codified. The goal was for people to all use the same name for any particular city, town, or road regardless of where you were within the country. Government officials began to demand that the entire country use a singular set of weight measurements, height measurements, etc. Cadastral maps were formed, as states began to demand that every piece of privately owned land have a single owner, the one who is obligated to pay tax. Scott says:

“These state simplifications, the basic givens of modern statecraft, were, I began to realize, rather like abridged maps. They did not successfully represent the actual activity of the society they depicted, nor were they intended to; they represented only that slice of it that interested the official observer. They were, moreover, not just maps. Rather, they were maps that, when allied with state power, would enable much of the reality they depicted to be remade.” (Scott 1998, p. 3)

Rather than the maps being redrawn to match the territory, the territory was beginning to be redrawn in order to match the maps. Legibility projects, ones designed to boil down the world into only the most crucial and relevant information, did not stop at simply trying to describe the world as best they could. Instead, they often began to restructure the landscape to better fit their models.

Scott’s historical examination of state-crafting shows how standardizing things such as place names changed the world mostly within the realm of human language and perception. Renaming a town doesn’t change much, if anything, about the town or the land it resides on. However, centrally enforced name changes and conventions resulted in silencing of the local and the personal. State control is not simply a tool for controlling the land; it can also be a tool for controlling the body and mind.[[5]](#footnote-4) As Scott describes, a population whose will and ability to resist has been bulldozed is perfect for a government trying to enforce standardization and central authority (Scott 1998, p. 5).

While standardization projects had clear effects on the physical landscape, Scott notes that land formerly seen as communal was split up into privately owned tracts, and farmed separately. New city constructions were oriented on grids, with order made so foundational that it became visible to the naked eye. For a contemporary example, consider city blocks. Usually uniform in size and shape, they tend to look rather clean both in maps and on the ground. Other examples include zoning law and city regulation. These cause cities to develop in visible ways, with the separation of elements like districts, housing styles, and industries. Thus, these incomplete views of the world became codified into the very ground, determining creations as abstract as voter districts or as tangible as road constructions.

## Section 1c: *Conformist Utopian Disasters*

 Here it is prudent to examine the stakes, to look at the ways legibility projects can fit together with authoritarian regimes in order to cause tremendous suffering.

First, Scott describes how some kinds of legibility projects are necessary for the workings of any functioning state apparatus. On their own, they are usually rather benign, but when twisted toward specific aims, they can start to enable toxic behavior. Second, Scott describes a kind of “high modernism”. On this, he says:

“It is best conceived as a strong, one might even say muscle-bound, version of the self confidence about scientific and technical progress, the expansion of production, the growing satisfaction of human needs, the mastery of nature (including human nature), and above all, the rational design of social order commensurate with the scientific understanding of natural laws.” (Scott 1998, p. 4)

Legibility is connected to hyper-rationalism, and the naive idea that through innovation and logic, humans can solve any problem we set our minds to. It is this idea of mastery, the mastery of both nature and our own humanity, that propels legibility projects, particularly in high modernist Europe. He says:

“It [high modernism] was fundamentally, as the term “ideology” implies, a faith that borrowed, as it were, the legitimacy of science and technology. It was, accordingly, uncritical, unskeptical, and thus unscientifically optimistic about the possibilities for the comprehensive planning of human settlement and production.” (Ibid.)

This kind of naiveté and blind faith is foundational for many of humanity’s greatest failures. Third, Scott describes:

“...an authoritarian state that is willing and able to use the full weight of its coercive power to bring these high-modernist designs into being.” (Scott 1998, p. 5).

Blind acceptance of authoritarian rationalism typically occurs during times of great upheaval, including “...war, revolution, depression, and struggle for national liberation.” (Ibid.) as the most likely contexts. This is when the legibility projects themselves are essentially given teeth, used as weapons in order to attempt a grand political vision. Oftentimes, such visions involve stepping on one or more populations, either as the direct purpose of the project, or through apathy toward them. Fourth and finally, Scott notes a point intimately connected authoritarian state power usage. Here he describes populations that are unable to resist the central decision-making of a regime. During times of strife and upheaval, social bonds are strained, and people are often willing to forget traditions or morals if they see themselves potentially getting something beneficial out of the situation. Additionally, military, economic, or social coercion can be mighty persuasive to even those people who were originally fervent in their opposition to a new regime and their plans. To summarize, Scott says:

“...the legibility of a society provides the capacity for the large-scale social engineering, high-modernist ideology provides the desire, the authoritarian state provides the determination to act on that desire, and the incapacitated civil society provides the leveled social terrain on which to build.” (Scott 1998, P. 5)

This analysis holds well for many of the greatest humanitarian disasters and atrocities of the 20th century. Most obviously this situation describes Hitler’s Nazism, Stalin's Communism, and Mao’s Marxism with Chinese characteristics[[6]](#footnote-5). While notions such as ‘New Soviet Man’ and ‘Great Leap Forward’ make for particularly clear examples of the phenomena Scott describes, he makes clear that this analysis can be applied to capitalist nations and contexts as well, saying “...the conclusion that can be drawn from the failures of modern projects of social engineering are as applicable to market-driven standardization as they are to bureaucratic homogeneity.” (Scott 1998, p. 8)

## Section 1d: *Scientific Forestry, A Legibility Project Paradigm Case*

The first chapter of *Seeing Like a State* describes a paradigmatic case of the legibility project, that of scientific forestry, invented in Prussia and Saxony during the 1700s. This is used as an example for institutional power, legibility projects, and of their potential downfalls. For my project, it helps exemplify the way that conformity isn’t only a social condition, as it is also something forced onto the environment itself. Such enforced conformity, whether social or environmental, can be profoundly damaging to living things and the environment.

In regards to medieval forestry, Scott says:

“The early modern European state, even before the development of scientific forestry, viewed its forests primarily through the fiscal lens of revenue needs.” (Scott 1998, p. 11-12)

With state security against warring kingdoms heavily prioritized, and resource gathering critical for maintaining infrastructure income, it's no surprise that the European state focused so heavily on lumber production. This state oversimplification is itself useful in some sense, but it masks the existence of so many other features of the forest. Scott says:

“Lurking behind the number indicating revenue yield were not so much forests as commercial wood, representing so many thousands of board feet of saleable timber and so many cords of firewood fetching a certain price.” (Scott 1998, p. 12)

Scott describes how this lens misses out on an extraordinary amount of the forest in itself. Plants and trees of little to no commercial value are ignored. Medicinal herbs, wild game (outside royal hunting stock), thatch for roofing materials, and other valuable materials were ignored by the state, while being utilized and desired by local peasants. Nearly everything that an anthropologist or naturalist would take note of sits outside of this lens, and as such is invisible to it. There is an even deeper level in which the forest is commodified and simplified. Scott says:

“The vocabulary used to organize nature typically betrays the overriding interests of its human users. In fact, utilitarian discourse replaces the term “nature” with the term “natural resources' ', focusing on those aspects of nature that can be appropriated for human use.” (Scott 1998, p. 13)

The forest is here conceptualized as a consumable resource, existing only for the sake of the economic and industrial activities which it enables. Scott goes on to note how certain plants are named “crop”, how those that challenge crops are deemed “weeds”, insects that consume crops are deemed “pests”, and how the latter two are destroyed with impunity. These examinations lead into Scott’s discussion of the “scientific forest” (Scott 1998 p. 14).

 Scott explains that the origins of the practice of scientific forestry was primarily borne in Prussia and Saxony during the mid to late 1700s. On this scientific forestry, he says:

“Its emergence cannot be understood outside the larger context of the centralized state-making initiatives of the period. In fact, the new forestry science was a subdiscipline of what was called cameral science, an effort to reduce the fiscal management of a kingdom to scientific principles that would allow systematic planning.” (Scott 1998 p. 14)

This cameral science was quintessentially high modernist, and intimately tied to the undertaking of legibility projects. Scott explains that before scientific forestry, the standard forestry technique was to divide one’s forests into relatively equal sections, with then harvest wood from one section a year. The total number of sections was determined by looking at the expected rate of tree growth, with the idea being that by the time they got back around to the start, the trees from that plot would be regrown. By the late 1700s, large scale wood shortages were plaguing Europe, and there were fears of not only a lack of wood and wood-related revenue, but also of upset peasants trying to get enough firewood to fuel their stoves (against orders from on high). To continue wood production unimpeded, a new system had to be devised.

 Next, Scott describes the start of such a new system. He mentions a man named Johann Beckmann, who devised a plan fitting into the first step of legibility projects mentioned earlier. Beckmann ordered aides of his to go into a forest section (chosen for being maximally representative of the country's forests as a whole). They entered with boxes full of nails, divided into five colored groups. Each nail color referred to a tree size, which these aides had been taught to identify. They walked through the forest together, nailing the colored nails into their respective tree sizes, until they had put a nail in all of the trees. By subtracting the number of nails left over of each color from the number each aide started with, and summing the totals, they could figure out how many of each tree size existed in the forest section. By extrapolating that section onto the whole country’s map, and assuming specific prices, they could make an estimation of the entire forest potential yield (and use that to derive a sustainable yearly tree harvesting amount). Advances in applied mathematics allowed for further estimation precision, as the volume of wood per average tree became studied. Results were tested in the field where kinks were then worked out. The results were put into complex mathematical tables, with which foresters could make powerful predictions. Scott says:

“By radically narrowing his vision to commercial wood, the state forester had, with his tables, paradoxically achieved a synoptic view of the entire forest.” (Scott 1998, p. 15)

This vision narrowing is synoptic in that it represents seeing the entirety of a specific characteristic. The forest as a wood-resource is seen in its totality.

 In regard to the “abstract forest” created by the scientific forester’s data tables, Scott says:

“...the three watchwords, in modern parlance, were “minimum diversity.” the “balance sheet,” and “sustained yield.” The logic of the state-managed forest science was virtually identical with the logic of commercial exploitation.” (Scott 1998, p. 15)

The commonalities with commercial exploitation are in some senses prophetic. Forest mapping had undergone a revolution, and now contained immense powers of prediction and planning. However, the foresters wanted to go further. Seeing how successful the scientific forestry project had been so far, foresters began to move into the next step, part 2 of legibility projects as a whole. Scott says:

“The fact is that forest science and geometry, backed by state power, had the capacity to transform the real, diverse, and chaotic old-growth forest into a new, more uniform forest that closely resembled the administrative grid of its techniques.” (Scott 1998, p. 15)

Extensive surveying was shown to be the precursor to outright world reconstruction. Plans for maximally efficient forests began to be drafted and implemented over the ensuing years. Scott explains how tree variety was reduced, sometimes to a single species in an area. Long straight rows of trees were planted, all at the same time, to ensure uniformity in growth and layout. Groundcover (fallen leaves, branches, etc) was removed from underneath the new plantings. Reality was made to conform ever closer to the approximations residing in the forester’s tables. Scott notes how this process made logging far easier, reduced necessary training for workers, and was replicable on a large scale. It increased the value of forest land, heightened lumber production numbers, and promoted uniformity in species and sizes of trees harvested. An added benefit to the “new legible forest” was a standardization of conditions, a creation which enabled a far easier time testing tree growth methods and additives. Scott says:

“Now that the more complex old-growth forest had been replaced by a forest in which many variables were held constant, it was a simpler matter to examine the effects of such variables as fertilizer applications, rainfall, and weeding, on same-age, single-species stands. It was the closest thing to a forest laboratory one could imagine at the time.” (Scott 1998 p. 18)

This scientific and technological achievement foreshadowed the contemporary factory farm. It enabled never before seen efficiency and standardization, and an even more legible lumber scenario. With these advances, one could understand nearly the complete lumber production story within an entire country, for a great many years into the future, all without having to enter or see the forest in itself. All the figures were available within the tables, economic and mathematical formulas, and supplementary material found within a forester’s headquarters. Because of their success, this scientific forestry project began to spread throughout Europe, eventually moving into a global consciousness. Scott describes how the scientific forest became famous for its regimented aesthetic, the appearance of order directly relating to the ease in management and human organized triumph over an illegible and confusing natural space. However, under the surface, cracks in the scientific forest’s perfection were beginning to form

 At first, the scientific forest posted exceptional results (by state metrics). Scott describes how for about 100 years (over a generation of tree growth) the engineered uniformity resulted in increased and consistent lumber production, ease in harvesting, and created greater uniformity in harvested tree size. However, invisible to the specialized lenses of the scientific foresters, problems were already arising. Peasants were unable to utilize the forest in the way they had previously, and suffered as a result. More important to the foresters, the engineering they had brought upon the land tremendously damaged biological diversity and natural cycles of forest growth. Scott explains that while the whole story of forest ecology is extremely complex[[7]](#footnote-6), there are some bottom-line conclusions that can be drawn. First, the clearing of underbrush and detritus removed nutrients from the system, impoverishing the soil. This resulted in significant drops in tree growth in future planting generations, as it appeared that the enriched soil from old growth forests was consumed in large degree by the first generation (leading to the fantastic growth). Second, the monoculture forest heavily diminished ecological diversity, resulting in disruption of countless systems necessary for a healthy forest ecosystem. Third, planting stands of same-type same-aged trees increases the dangers of large scale storm-based tree damage, creating exceptional environments for the insects, fungi, and such disease agents that targeted the monoculture species chosen. In short, a more diverse forest is better able to survive crises. Instead of abandoning the scientific forest, the German government decided to try to prop it up, with elaborate fertilizer schemes, artificial wildlife diversity programs, and various other scientific and technological interventions (of mixed success). The natural diversity which had been the forest's greatest strength was not turned to as a solution.

## Section 2: *Heidegger, Technology, and Standing-Reserves*

Scott’s earlier denotation of “natural resource” mirrors a framework described by Martin Heidegger in the essay *A Question Concerning Technology*[[8]](#footnote-7). The relevant aspect of this text is in Heidegger’s classifications of our engagement with the world and ourselves. First, he describes the greek term “poiēsis”, which he takes to mean a “bringing-forth” (at other times he uses the term “unfolding” to mean something similar) (Heidegger 1977 p. 293, 300) He characterizes this as a nondestructive engagement, a working with nature. The other categorization he uses is the German word “Herausfordern”, which means “challenging” (Heidegger 1977 p. 296). This challenging is best described as usage combined with consumption. This is tied into the making of something into the means of a separate end (ex. cutting down wood and storing it to be burned for some future project). Energy storage is crucial in differentiating these categories, for Heidegger explains how the use of an “old windmill” is not a challenging, because it isn’t consumption of the world, and because it isn’t used to produce stored power. The wind is not consumed, nor impacted to any major degree. To further explain challenging, he references coal mining, saying:

“The coal that has been hauled out in some mining district has not been produced in order that it may simply be at hand somewhere or other. It is being stored; that is, it is on call, ready to deliver the sun’s warmth that is stored in it. The sun’s warmth is challenged forth for heat, which in turn is ordered to deliver steam whose pressure turns the wheels that keep a factory running.” (Heidegger 1977, p. 296-297)

The mining and burning of coal is a challenging, for it is unsustainable consumption of the world, for the sake of the factory steam engines, which are there for the sake of producing some material product.

For Heidegger, challenging is not limited solely to energy. He argues that is the way of being that more recent technology presents us with. To further explain, one could say that the way of engagement that “modern technology” puts forward is something of an instrumentalizing, of constantly making more of the world into means to some other end (Heidegger 1977 p. 296-298). Heidegger argues that this consumption and restriction of the world, as seen through challenging, is characteristic of our pursuits and usages of modern technology. He says:

“Everywhere, everything is ordered to stand by, to be immediately on hand, indeed to stand there just so that it may be on call for a further ordering. Whatever is ordered about in this way has its own standing. We call it the standing-reserve [*Bestand*].” (Heidegger 1977, p. 298)

The outcome of challenging is an instrumentalizing of the world, the relegation of components for later usage and consumption. The scientific forest that Scott describes is one such standing-reserve. It is built for the sake of supplying a future lumber-yard with raw materials, and in re-creating a region of the environment to suit efficient wood production of lumber. Large aspects of the environment which don’t obviously support the lumber production aim are suffocated. Heidegger’s hardest hitting point is on the being and status of humans themselves. He says:

“Only to the extent that man for his part is already challenged to exploit the energies of nature can this revealing which orders happen. If man is challenged, ordered, to do this, then does not man himself belong even more originally than nature within the standing-reserve? The current talk about human resources, about the supply of patients for a clinic, gives evidence of this. The forester who measures the felled timber in the woods and who to all appearances walks the forest path in the same way his grandfather did is today ordered by the industry that produces commercial woods, whether he knows it or not.” (Heidegger 1977, p. 299)

The “revealing which orders” is the process that modern technology facilitates and promotes, and results in the creation of standing-reserves. Such standing-reserves can target both living and nonliving, often with tragic results. This ties back to high modernism, as it is the creation of order and legibility. Heidegger is arguing that because humans are being corralled into continuing and expanding this process, that they themselves are components of a kind of standing-reserve. This is because of the similarity between them and coal waiting to be burned, shown in how they are being pushed toward ready and available regarding the expansion of such standing-reserves overall. The examples of “human resources” and “supply of patients for a clinic” showcase a potential for grotesque materialization and dehumanization. People are seen as mere matter, as fuel. To dehumanize is also to standardize.

A forest as seen solely for its usable lumber, a human seen solely for their summed productivity, these products of dehumanizing lenses representative of the Heideggarian standing reserve. Such rationalizing lenses are distorting, and if made to be our entire way of seeing the world, the results would be horrific. Everybody and everything would be seen only in regard to how they can be used for furthering some productive end goal. If the standing-reserve were continuously expanded, the endgame[[9]](#footnote-8) would be the whole population and world simply a going through motions, completely subservient to some goal or another. Everything would be consumed and used for the sake of principles that have at that point been lost. The endgame of an absolute and unfettered capitalist system would be an example of this process, with money and profit being the principles that the world would revolve around. No such absolute capitalism has yet existed at any large scale in human history. However, with the way that production and consumption continue to control such large portions of human endeavors, and are expanding overseas as globalization continues its work, the end result could be a subjugation of Earthly life. An absolute unfettered materialist desire might also have a similar endgame, and in many ways overlaps with an endgame of unrestricted capitalist domination.One could end up seeing all beings as simply particular compositions of atoms, useful only for their ability to contribute to dominant systems of their environment (ex. resource extraction, consumption of excess materials, production of scientific and technological tools).

At a more everyday level, one who makes themself subordinate to amassing wealth is at some level defining themself by that wealth. This is similar to a reading of Sorin Kierkegaard by Timofei Gerber. While explaining his reading of Kierkegaard, Gerber says:

“The desire to become more powerful is an attempt to control the (physical, natural) forces of the world — but how can we do that, except by becoming such a force ourselves? By becoming more and more entangled in these external dynamics, the self reduces its difference to the world, and only completes its dependence.” (Gerber 2017)

Such a dependence connects to the kinds of materialist and capitalist endgames I was describing earlier. It results in a person and/or part of the world becoming ‘mere matter’, simply stuff whose sole existence is to be used and consumed.

## Section 3: *Technology and Computing in the Digital Age*

“The cathedral is not a perfect metaphor for computation, but its flaws signal precisely what we are missing. A cathedral is a physical and spiritual structure, a house of God. In that sense the physical appearance of the building tells particular stories about faith and practice (e.g., a baptismal font, a nave pointing east, illustrations of biblical stories). But it also suggests a particular mode of access to the invisible space of religion, the house of God that exists beyond physical reality: transubstantiation, relics, and ceremonies are all part of the spectacle of the cathedral that reflect the invisible machinery of faith. Yet most of that machinery inevitably remains hidden: schisms, budgets, sandals, doctrinal inconsistencies, and other elements of what a software engineer might call the “back-end” of the cathedral are not part of the physical or spiritual facade presented to the world.” (Finn 2017, p. 7)

 In *What Algorithms Want: Imagination in the Age of Computing*, Ed Finn examines our contemporary relationship with computation and algorithms. The rationalism implicit in such computers raises similar issues to those discussed with scientific forestry and standing-reserves. Finn describes how modern computing technologies fundamentally rely on algorithms, and that as a result, when we as people rely on such technology we are fundamentally relying on algorithms too. Such algorithms can be described as step by step instruction sets for getting from point a to point b. These instructions are fed into computers, the processors follow the steps, and they spit out some kind of output. In regards to the development of the computer algorithm, he says:

“Throughout this evolution, the algorithm retained an essential feature that will soon become central to the story: it just works. That is to say, an algorithm reliably delivers an expected result within a finite amount of time (except, perhaps, for those edge cases that fascinate mathematicians and annoy engineers).” (Finn 2017, p. 17)

This achievement of reliability mirrors rationalist notions of the administrative state. As the scientific forester desires a reliable and consistent supply of wood production, the computer scientist desires a reliable pathway to outputting some important result (such a result will likely be sent to another pathway, and processed in a new fashion). Finn goes on to say:

“Algorithms represent repeatable, practical solutions to problems like factoring a number into its smallest prime number components or finding the most efficient pathway through a network. The major focus for contemporary algorithmic research is not whether they work but how efficiently, and with what tradeoffs in terms of CPU cycles, memory, and accuracy.” (Finn 2017, p. 18)

Finn describes how these algorithms end up being applied, saying:

“The algorithm deploys concepts from the idealized space of computation in messy reality, implementing them in what I call “culture machines”: complex assemblages of abstractions, processes,and people. Algorithms enact theoretical ideas in pragmatic instructions, always leaving a gap between the two in the details of implementation.” (Finn 2017, p. 2)

This gap is reminiscent of the difference between the mapping output of a legibility project, and the higher complexity and nuance of the examined substrate. While working at the level of idealization and simplification can be useful for building abstract concepts, one must always be aware of the gaps between that space and the “messy” reality Finn brings to light.

Describing connections between faith and technology, Finn discusses the author Ian Bogost, saying

“We have, [Bogost] argues, adopted a faith-based relationship with the algorithmic culture machines that navigate us through city streets, recommend movies to us, and provide us with answers to search queries. We imagine these algorithms as elegant, simple, and efficient, but they are sprawling assemblages involving many forms of human labor, material resources, and ideological choices.” (Finn 2017, p. 7)

Finn shows how a clean and sleek outward appearance here gives way to a tangled mess of information under the hood. When utilizing a phone app, the vast majority of users would be paying no attention to the computer code going on behind the screen. The view of the application as presented to us is an oversimplification and distortion, with its slick graphics and smooth user interface options. Finn goes on to say:

“Bogost’s central argument is this: while we imagine algorithms as a pinnacle of Enlightenment, rationalist thought, our engagements with them function in a very different mode. Through black boxes, cleanly designed dashboards, and obfuscating Application Program Interfaces, we are asked to take this computation on faith.” (Finn 2017, p. 7-8)

Here, black box is a term used to describe obscured inner workings. When using a GPS application, there is no checking the work of the algorithms. One cannot go into the black box and observe in real time the dataset and information processing going on. Returning to Scott, he says:

“The carriers of high modernism tended to see rational order in remarkably visual aesthetic terms. For them, an efficient, rationally organized city, village, or farm was a city that *looked* regimented and orderly in a geometric sense.” (Scott 1998, p. 4)

This high modernism didn’t only apply to government projects of the 19th and 20th century. The modern phone application is just one contemporary technological example of this aesthetic in action. As is usually the case, a surface presentation of rational order gives way underneath to tangled nuance and complexity.

 So often with contemporary technology, numbers are used in place of the world as it really is. While often useful abstractions, these numbers carry with them a set of baggage and limitations. Finn says:

“We confuse knowledge and meaning, process and purpose, by substituting the teleology of the original Enlightenment quest for knowledge with that secondary substitute, the quest for quantification and calculability.” (Finn 2017, p. 38)

That question for knowledge is tied to the rationalism discussed during the sections on Scott. Critically, when engaging with numerical abstractions, one is only working with quantitative descriptions, rather than descriptions of the parts of the world being counted. Finn relates the quest for quantification to another enlightenment project, one that could be legitimately called a legibility project of its own. Regarding an early encyclopedia, he says:

“The *Encyclopédie* was a dangerous book for its time because it presented a holistic, secular view of human knowledge - not just a list of topics from A to Z, but what computer scientists would call a new ontology of information.) (Finn 2017, p. 69)

The thread that connects this encyclopedia so clearly to rationalism is the aim. Finn describes how the authors/editors of it were trying to collect and systematize all the knowledge of the world. To further explain what he means by ontology of information, Finn says:

“Ontologies present an ideological position about the hierarchy of knowledge, organizing subjects into trees that are both genealogical and determinative.” (Finn 2017, p. 69).

In essence, this project is trying to make the entirety of human knowledge into a single legible text. As Finn describes, such a project is bound to an ideology, a way of organizing the information as well as the world. He explains that this encyclopedia project is at least in part a predecessor to the idea of the “*Star Trek* computer system”. Finn describes this computer system across various iterations of star trek, saying:

“At its peak, it served as a kind of natural language interface for data science, seeking patterns in various kinds of information and presenting analysis. Most important, it presented a simple ideal of frictionless vocal interaction...” (Finn 2017, p. 67).

Finn ties this fictional computer system to Alphabet company’s Google search engine and Siri program. He notes that various engineers and employees of Alphabet have described the Star Trek computer as an inspiration for their project. Here we come back to notions of standing-reserve. In essence, the goal of the Encyclopédie, the *Star Trek* computer, and the google/siri partnership is to turn the entirety of information itself into a ready to hand compilation of all knowledge. That knowledge is sitting there, organized, existing for the sake of being referenced at some later point. While this kind of information organization may seem rather innocuous, the power that the google/siri combination has over our behavior is quite high. When it starts to get more worrisome is the addition of Big Data and mass advertisement systems. Finn describes how most of Google’s revenue is from advertisements. Mass collection of user data is a kind of legibility project as well. It can be used for relatively benign ends, such as deciding what shoe ad to show a particular user. However, such information can be used to track, monitor, and predict people as well. As such tracking and prediction systems become more widespread, the potential for malicious usage increases.

Conversations on technology and search engines tie into cloud computing and storage. Cloud computing is when you essentially connect your system to an external computer bank, for the storage of information or the use of external computer processing power. Clearly such external computer banks are not located in clouds. Rather, they tend to exist as clumps of computers within specially constructed facilities. The cloud as a conceptualization is a world of platonic forms, a non-reality. The physical brings with it notions of fallibility, notions that tech industry as a whole would prefer lay hidden beneath smooth user interfaces. If the gap between the idealized and the in-practice becomes apparent, the imagery begins to crumble. Like the revealing of the man behind the curtain, being reminded of the gap takes the magic out of the technological aesthetic.[[10]](#footnote-9) One way for this curtain to fall is when our technology fails. This is similar to Heidegger’s notion of handyness as explicated in *Being and Time*. In essence, the idea is that one can be shocked out of a habitual use of something when it breaks during usage (Heidegger 1962, p. 138, H. page 104). Here I will describe the frequent Heidegger example of a hammer in use. When one holds a hammer, with a nail they are trying to drive, the usage is near effortless intellectually. Hammers are for hitting nails. However, Heidegger notes that if the hammer breaks during usage, it can cause a jolt, one that can lead to reflection on the activity in itself. One could then ask what the hammer is, what they are doing with it. Such questions are not ones typically asked when using a familiar object like that. A similar scenario to the hammer breaking is the failing of a computer program.

For an example, I will use these concepts in order to examine a chat program named Discord. The communication platform Discord is a computer program that fulfills a similar role to Skype. It has individual chat rooms, private messaging, audio/video calls, that kind of thing. The interface is quite slick, and there is usually no reason to ask what's going on under the surface (unless one is particularly privacy focused/obsessed). However, if the service for it goes down, if messages and/or voice calls stop functioning, that draws attention to the underlying connections and systems keeping it functional in the first place. It also draws attention to their fallibility. Of note, after a string of outages, Mark Smith (Discord’s infrastructure director) released a blog update on the subject. On December 18th, 2019, Smith described the outages in some detail. After laying out a list of changes they are making to prevent downtime in the future at Discord, Smith said:

“Discord is supposed to just work — wherever you are, whatever you’re doing. That’s our goal, and we haven’t been hitting that. We’re sorry, and it’s our promise to you that we’re doing everything we can (and making progress!) towards fixing this.” (Smith 2019, digital source)

The notion that our technology is just supposed to work is quite widespread. In particular, companies like Apple pride themselves on sleekness and ease of understanding in regard to their products. Overall, tools designed for public consumption tend to be designed around accessibility and ease of access. When one doesn’t have education in computer science, there is usually no need or drive to understand how the hardware connects with the software, or the intricacies of the coding overall.

 There is a sense in which this engagement with technology is a kind of faith. While using a computer isn’t the same as ancient people praying for rain, there is at least some overlap. There is a belief in the work we are doing, just as many ancient people believed in the effectiveness of prayer to local deities. Additionally, many people’s lack of under the hood understanding mirrors that of such ancient worshippers. While science and technology are certainly more tangible than beings in the sky determining weather patterns, we must still be careful of the ways our technology can blind us.

 Overall, contemporary technology and our relationship with it is crucial for how we move into the future. Inherent to much of this tech is the usage of legibility projects, something only expanding as big data expands its tentacles into ever more places. Heidegger’s notion of standing-reserve dovetails into Scott’s concept of legibility projects, especially in regard to how they are used to recreate the world. Such recreation often inherently involves the turning of the substrate into a surface upon which to imprint a central will. This results in the substrate becoming seen solely for its ability to be consumed or shaped, often without a full awareness of the repercussions. A toxic faith in reason and our human ability underlies some of the most damaging technological usages, and threatens to curtail freedom and emancipation (via deliberate and accidental mechanisms).

## Section 4: *Modernism, Postmodernism... Walls and Fences*

“...a genuine deconstruction of the world of our time begins with the full recognition of the perforce provincial status of our discourses and the necessarily regional character of our concepts - and therefore with a critique of every form of abstract universalism. This doing, it endeavors to break with the spirit of the times, which, we know, is about closure and demarcations of all sorts, and in which borders between here and there, the near and the distant, the inside and the outside, serve as a Maginot Line for a major part of what passes as “global thinking” today.” (Mbembe 2019, p. 9)

One of the telltale markers of modernity and human “development” has been the creation of borders, both physical and metaphorical. One way these borders are made ‘legible’ is through maps. At the global map scale, there is the construction of well-defined boundaries characteristic of the nation state, balkanization, and the construction of arbitrary colonial territories. In *Necropolitics*, Achilles Mbembe writes

“...the process of *exiting from democracy* and the movement of suspension of rights, constitutions and freedoms are paradoxically justified by the necessity to protect these same laws, freedoms, and constitutions. And with exit and suspension comes enclosure - that is, all sorts of walls, barbed-wire fences, camps and tunnels, in-camera hearings.” (Mbembe 2019, p. 40)

The exiting from democracy referred to here is at least in part the global populist right surge of the recent few years. Far from Fukiyama’s End of History, contemporary world politics is alive in the same sense as a fire (Fukuyama 1989). As a Vox article reports, “...the Covid-19 pandemic has sparked anti-Asian xenophobia across the US.” (Kim 2020, digital source) Fearmongering over refugees seeking aid and asylum has turned into fearmongering over anybody who appears Asian, as COVID has taken over popular awareness, including that of the prejudiced and uninformed. Nationalism and isolationism are spirits of our time.

Technology is not free from this border-constructing phenomenon, as echo chambers materialize across social media spaces. ‘Alternative facts’, pseudoscience, anti-vaxxers, conspiracy theorists, all of these emerge as the Digital becomes democratized. Like the printing press before it, the internet has enabled a phenomenal increase in accessibility to audiences, to ‘The Word’. Nearly anyone (in the “west” at least) can become an author of sorts by simply posting a status update to their in-group on Facebook. According to a subset of tech enthusiasts, the internet was supposed to be emancipatory, it was supposed to enable free connection and mutual understanding, in a process of breaking down borders of all kinds, and allow freedom from governments and corporations by allowing non-proprietary software development. However, any open-source dreams were crushed by the privatization and enclosure projects, the most obvious example being Bill Gates and Microsoft. The dream of a network of freedom fighters, connected globally via the internet, organizing and supporting both democracy and an end to oppression, is clinging by a thread.

Fearmongering, in group-out group, and tribalism are nothing exclusive to our present day. However, such phenomena are uniquely situated to take advantage of contemporary conditions, in order to disrupt and distort democracy, mutuality, and any kind of coming together. Mbembe says:

“The enthusiasm for origins thrives by provoking an affect of fear of encountering the other - an encounter that is not always material but is certainly always phantasmic, and in general traumatic.” (Mbembe 2019, p. 30)

We encounter those ‘unlike’ us as distorted images, collections of stereotypes, fetid banal tropes regurgitated and perpetuated by prejudicial social interactions. Appeals to an origin of ‘cleanliness’, of ‘sanctity’ are most clear with racial and nationalist discrimination, but an attempt to return to a ‘pure origins’ is so often foundational to all kinds of tribalistic echo chambers, from reactionary religious cults to anarchoprimitivists and antivaxxers. One irony is that to call out a group of people for toxic behavior is an action that in itself creates a new in-group and out-group.

 How can we derive a line of flight[[11]](#footnote-10) away from these conditions? Mbembe says:

“The reconstitution of the common begins with an exchange of speech and a breaking of silence.” (Mbembe 2019, p. 142-143)

This common space is a mutuality, a recognition. One sees parts of themselves in another, and the other ceases to be quite so Other. The other also sees parts of themselves in the one. Here I am reminded of Wittgenstein’s concept of language games. A language game is essentially a set of rules by which one communicates an idea. The intersubjective nature of language is here highlighted, because if there are two people conversing, and only one ‘player’ knows the rules of the game (the specific word meanings, the context, etc.), then playing the game becomes impossible. A conversation must then be had in order to build mutual understanding, and only then can a more genuine connection develop.

If two people are speaking, one speaking Mandarin Chinese and the other speaking Dutch, it becomes rather clear to all parties involved that mutual communication (and thus mutual recognition) is not occurring. However, when two people are (apparently) speaking the same language, say English, there is still adequate space for misunderstanding. This can be insidious, because at face value, communication is obviously occurring. However, everyone has an individual set of experiences with any particular word. Additionally, many words have vague and/or contested definitions. Oftentimes disputes occur over what appears to be substantive position differences, but in reality are rather different conceptions of key terms and phrases. Thus, a certain kind of ‘good faith’ must be made by all those attempting mutual recognition. This includes patience, and a willingness to admit mistakes when one makes them (for we are all fallible). Crucially, you cannot engage in mutual recognition with someone you silence or dehumanize[[12]](#footnote-11).

One of the core dangers of legibility projects is the potential to silence and dehumanize people at a large scale. Part of this process is the erection of borders, as we are defined in opposition to those perceived to be unlike us, and as such we lose substance. Mbembe says:

“There is a refusal to recognize that, in truth, our ego has always been constituted through opposition to some Other that we have internalized - a Negro, a Jew, an Arab, a foreigner - but in a regressive way; that, at bottom, we are made up of diverse borrowings from foreign subjects and that, consequently, we have always been *beings of the border* - such is precisely what many refuse to admit today.” (Mbembe 2019, p. 30)

Identities built off this opposition force inherently create separation and get in the way of mutual respect and understanding. Mbembe describes how fearmongering storytelling is a huge component of our current world situation. He notes that such stories are more about what people accept rather than about actual occurrences. Calling them “Stories of threat.”, he describes how they are designed to create sociological borders between populations. (Mbembe 2019, p. 30)

In an almost ironic sense, Mbembe argues that we are actually more connected than ever. In opposition to atomizing and fear-spreading narratives, he says:

“...ours is a *time of planetary entanglement*. Worldwide, the combination of “fast capitalism,” soft-power warfare, and the saturation of the everyday by digital and computational technologies has led to the acceleration of speed and intensification of connections.” (Mbembe 2019, p. 93)

Transit technology enables broader economic reach and fuels international travel. Greater logistic chains and globalized supply lines connect world economies, resulting in a web of interdependence. The information age has resulted in a kind of global compression, as information superhighways allow for near instantaneous communication across the planet. Protest movements and political ideologies can spread beyond local borders like never before. For example, methods of protest suppression can spread across authoritarian states in a similar manner as methods of protest support can spread across social media. Geopolitics is becoming increasingly global, as the world moves beyond monopole or bipole power differentials. Rainfall in Africa can impact American crop prices. Finally, there is the matter of our shared Earth. Pollution of a river flows downstream, caring not about local or national map-based borders. There are few places on this planet which remain untouched by human pollution. As seen with the damage caused by ozone depleting substances, effects of human-driven pollution are above the scale of any individual country. Rising sea levels threaten vast tracts of land, and rising quantities of abnormal disaster weather threaten to hurt the vulnerable and oppressed most of all. Especially due to our globalized economies, a climate catastrophe would leave no human unaffected.

Mbembe argues that borders and their creation are the root issue behind a great deal of contemporary violence and oppression. He says:

“Borders. Everything begins with them, and all paths lead back to them. They are no longer merely a line of demarcation separating distinct sovereign entities. Increasingly, they are the name used to describe the organized violence that underpins both contemporary capitalism and our world order in general...” (Mbembe 2019, p. 99)

While most obvious here are hardline immigration politics and denial of refugees, constructing social borders around gender, sexual, and racial minorities can be just as vicious. At some level, I don’t think borders ever were simply ‘lines of demarcation’. To assert a border is to threaten some kind of response should it be crossed. Much like legibility projects in themselves, borders have a place. However, we can’t lose sight of harms they can cause. Mbembe says:

“In fact, everything leads back to borders - these dead spaces of non-connection which deny the very idea of a shared humanity, of a planet, the only one we have, that we share together, and to which we are linked by the ephemerality of our common condition.” (Mbembe 2019, p. 99)

By separating people by appearance and personality categorizations, there is an implicit focus on what makes us different than each other. While there are certainly times to look at the benefits of variety, as a homogeneous human population would be both boring and ineffective, we must also grasp our shared experiences. To fixate on difference necessarily results in the creation of ingroup-outgroups. As Mbembe says, not only do we share a world, we also share the burdens of mortality and temporality. Prioritizing mutuality sets the stage for enabling each other’s thriving.

 Mbembe focuses in on the active component of borders, saying:

“But perhaps, to be completely exact, we should speak not of borders but instead of “borderization.” What, then, is this “borderization,” if not the process by which world powers permanently transform certain spaces into impossible places for certain classes of populations? What is it about, if not the conscious multiplication of spaces and loss and mourning, where the lives of a multitude of people judged to be undesirable come to be shattered?” (Mbembe 2019, p. 99)

Legibility projects fuel and enable this “borderization”. They determine who gets a voice and who doesn't, who is included vs excluded. They can create barriers (both physical and social), as well as disenfranchise those not on the design team.

 At a grander scale, the creation of arbitrary colonial borders for the enrichment of European power-holders is the most obvious example of toxic borders, as local populations were reduced to at most slave revenue expectations.

At a more local level, there has been parceling of land for taxation purposes[[13]](#footnote-12), the encroaching onto peasant land use rights[[14]](#footnote-13). More contemporary has been the construction of suburbs and gated communities. Scott compares ‘old growth’ European cities with ones preplanned and foundationally gridded, noting the way order is imposed via strict boundaries between neighborhoods, blocks, etc. Texts such as *SUV Citizenship* describe how liberal ideals of individual freedom, when taken to extremes, result in the construction of the atomized individual, devoid of social connectivities.

At a technological level, the creation of internet echo chambers via self-sorting and conformity pressure fuels divisiveness and groupthink. This impedes thoughtful conversation and limits engagement between those of different perspectives and expertise. These borders reach into social spaces, with texts such as *Bowling Alone* exploring a loss of ‘Social Capital’ within America. Amid a worldwide loneliness crisis, with churches and social groups losing ground, actions must be taken to maintain intersocial connectivity.

# Bridge: *Dystopian Fiction and Lessons Learnable*

The government of *Brave New World* is the apotheosis of conformist utopian systems. Conformity is baked into the process at a fundamental level. People are separated into different groupings, with the lowest on the hierarchy being dumbed down during their birth process. Mindless sex and daily drug consumption is used to keep the population compliant, and anybody who doesn’t conform to this system is essentially banished to isolated islands. Figures such as Henry Ford are worshiped as near deities, and in many regards the global society is based around the production line. People are generally happy, but are living for almost no purpose. Art is essentially dead at a large scale, with endlessly recycled content aimed at the lowest common denominator. Such a future could be ours, if we aren’t careful.

 “I, would like to show, cut open my skull, look into my head.” (Psycho-pass Opening Theme #2[[15]](#footnote-14))

The show *Psycho-Pass* resembles the movie *Minority Report*, but has a more fleshed out set of world-building components. Set in near-future cyberpunk Japan, the key feature of the show for my thesis’ purposes is the Sybil system. Essentially, it is like a cctv surveillance system, similar to an expanded version of the surveillance system in the U.K. On that, James Temperton says “The UK is one of the most surveilled nations in the world. An estimated [5.9 million](https://www.bbc.com/news/uk-30978995) CCTV cameras keep watch over our every move” (Temperton 2015, digital news article). Temperton goes on to describe how there are attempts to automate the process of CCTV video output analysis, as UK police rely upon humans to watch the footage and find relevant evidence. This automation program was set to go live back in late 2015.

Back to Sybil, this system was designed to end criminality[[16]](#footnote-15). It combines futuristic CCTV technology with sensors that scan people’s mental states. Then it outputs a rating regarding the likelihood of this person to commit a crime in the near future, and recognizes if the person has already broken the law recently. Those who are guilty of smaller crimes, or are showing signs of potential to commit crimes in the near future, are typically sent to “therapy”. If such mandatory therapy is successful at restoring one's mental rating, they would be released back into society. In particularly bad cases, people are permanently isolated from society. Such a system is a culmination of a series of legibility projects

While the Sybil system’s relationship with criminality is most heavily examined, it also performs other functions within society. One of its other major functions is to do personality scanning, which is combined with standardized tests in order to determine what jobs the system thinks an individual would be most suitable for. This system is the apotheosis of the standardized testing format in general, where one’s life and future are converted into legible metrics.

Discuss criminally asymptomatic

Much of the series is an exploration of the gap between theory and practice, as the system turns out to be unable to detect criminality within a small subset of the population.

# Part 2: A Life-Affirming Reconstruction?

## Section 1: *COVID, Othering, and Alienation*

COVID is a crisis unlike any I have seen before. However, it does have similarities with situations of the past, ones I have studied in some detail. The first similarity that comes to mind is the Cold War. While on the surface these are rather different, paranoia connects them. During the cold war, a great deal of fear occurred. Beyond fear of nuclear destruction, there was fear of communist ideology spreading. Anxiety over domino theory and geopolitics created an atmosphere of a hostile world. Mccarthyism and anti-communist hysteria manifested itself within the cultural psyche. This resulted in content such as the movie *Invasion of the Body Snatchers*[[17]](#footnote-16), where our own neighbors become the Enemy. The result is an alienating force, a doubting of those you thought you knew. A similar phenomenon is occurring with COVID, only this time it's even less clear who or what “the enemy” is. With the pandemic being viral, human bodies themselves are the vehicles of spread. If this spread were only found in symptomatic people, then we would have warning signs, awareness of who we are safe to be near. However, with asymptomatic carrier (and transmitter) rates being estimated at 25-50% of the infected, even those who show no symptoms could potentially be a threat. Most of America has now shut down regular social channels. Anything that can be done remotely and digitized is being sent to the net. Without even going into the tremendous economic damage suffered, the pain, the loss of life, there is this fear of the unknown. It manifests as a fear of other humans, in some sense at least. People are avoiding each other outside. Restaurants are shuttered. Facemasks are becoming more and more popular. We are having to reconsider even the most basic human interactions, as families are forced to separate, friends are forced to avoid shaking hands, or hugging. Dating has shuddered to a near halt. Concerns over simply being within a crowd of people will likely live on beyond the duration of the pandemic.

 The isolation of COVID quarantining continues a trend of loneliness, within the western hemisphere at least. Even before social distancing, there was still a great deal of social distance, as relationships and human connection became directed more and more toward the digital. Isolation doesn’t just get in the way of relationships, it gets in the way of physical presence. We are embodied beings, we have form and tangibility. Abstracting away from that is at least dangerous. In an increasingly digital and conceptual world, it is perhaps more important than ever to ground ourselves to our bodies and localities. In the essay *Placing the Soul*, Norman Wirzba describes an urge toward flight. Regarding American culture, he says

“...there is a longstanding philosophical and religious tradition that has encouraged the training of our attention, care, and desire *away from* this world and this life. In other words, our tendency had at times not only been to forsake a given place for the opportunities afforded by a virgin frontier, but to forsake all physical places as inherently limiting, defective, or beneath our ultimate concern.” (Wirzba 2003, p. 80-81).

Wirzba goes on to explain that Plato’s figure of Socrates, his world of Platonic Forms, and certain branches of Christianity are all engaged in a philosophy of flight, an escape from our tangible conditions. Rather than being an emancipatory flight, Wirzba argues that such a flight is a losing touch with reality. Similar to lightness in Kundera's *The Unbearable Lightness of Being*, this flight trends toward meaninglessness.

 In a similar tone to Wirzba, there are a few lines within the architecture and city planning book *A Pattern Language*, ones that shed light on our tangible physicality. The book is divided into a series of “patterns”, ones which are described as examples of a way to solve a particular problem within architecture. They are ordered in decreasing scale, so the earliest patterns describe situations relevant to a metropolitan area in its entirety, and the final patterns describe single parts of a single room. Pattern 24 is named “Sacred Sites”. It says:

 “...in every region and every town, indeed in every neighborhood, there are special places which have come to symbolize the area, and the people’s roots there. These places may be natural beauties or historic landmarks left by ages past. But in some form they are essential.” (Alexander et al. 1977, p. 132)

Such places don’t need to be particularly grand or elegant, they simply need to be locations for community gathering. The text goes on to say:

“...modern society often ignores the psychological importance of these sites. They are bulldozed, developed, changed, for political and economic reasons, without regard for those simple but fundamental emotional matters; or they are simply ignored.” (Alexander et al. 1977, p. 132)

In a postmodern world, steps must be taken to ground us. Some balance must be struck between the freedom to create a new future, and a recognition of our past and context. These grounding steps do not have to be religious, nor do they have to be secular entirely. What I find critically important is that they are chosen and maintained in a thoughtful manner. To arbitrarily continue the motions of the past is to maintain tradition in a blind manner.

## Section 2: *Flight- Digital>Analog*[[18]](#footnote-17)

“We need experimental humanities, a set of strategies for direct engagement with algorithmic production and scholarship, drawing on theories of improvisation and experimental investigation to argue that a culture of process, of algorithmic production, requires a processual criticism that is both reflexive and playful. This is how we can begin to understand the figure of the algorithm as a redrawing of the space for cultural imagination and become true collaborators with culture machines rather than their worshippers, or worse, their pets.” (Finn 2017, p. 13)

Over the last decades, humans have moved more and more online. This leads to new opportunities for connection, with video calls and email connecting much of the world into a device fitting in the palm of a hand. I have friends and acquaintances from dozens of countries across the world, ones I talk to daily. This affords me unique conversations with those of other cultures, lifestyles, and contexts, ones I would struggle to come across even 50 years ago. As the internet spreads and intertwines, the web of ties gets more dense and interconnected. National barriers, such as China’s firewall or North Korea’s isolation, are enough to slow the connectivity. However, many of these barriers are at least semipermeable, and there is no assurance they will stick around forever. These digital connections create something of a global community, and enable a level of mutual understanding for populations separated from great distance.

Sadly, there is a dark side to the proliferation of the digital world. Attention economies, based around the currency of likes, subscriptions, and comments are growing ever more powerful. Driven by chasing of ad revenue, clickbait and shock value content is taking over news and entertainment. Outrage culture results in a great many tweets, but far less nuanced conversation or on-the-ground activism. Loneliness and social isolation are themselves reaching epidemic levels among many “western” countries, something exacerbated by COVID. As classes and meetings go online due to the disruption from the virus, it seems likely that some will never go back to an IRL status. There has been something of a backlash, as many people are frustrated to be spending so much time behind screens and away from the tangible experiences of being with others. However, I suspect it will take more than that to put any serious dent into digital proliferation. The expansion of the internet of things keeps marching on, as even refrigerators are beginning to be connected to the net. Thinking back to the Finn quote at the section beginning, there are also two further out concerns worth considering. First, Finn mentions the potential for us to become worshippers of our technology. This could be as simple as letting our lives become devotion and reification of google searches and twitter conversations, or as revolutionary as a holistic AI prophet-system, a modern day Oracle of Delphi for the digital age. Second, Finn mentions the potential for us to become pets of our technology.

Another aspect of life being forever changed by the internet and related technology is personal identity. Mbembe says:

“Leaving beyond the ages of stone and silver, of iron and gold, the human for its part is tending to become plastic. The advent of the plastic human and its corollary, the digital subject, goes flush against a number of convictions that until recently were held to be immutable truths.” (Mbembe 2019, p. 13)

He describes the ways in which humans are themselves necessarily part of a broader biosphere of Earth, and how the bounds between the human and animal are more murky than they have so often been made out to be. He notes how any “essence of man” is inherently adaptable via genetic and biological engineering, leaving us without a stable platform on which to claim a singular “humanity” (Mbembe 2019, p. 14).

Tied to this, Mbembe describes the color bleeding between the online and offline worlds. He says:

“Aided by the power and ubiquity of the digital phenomenon, no impenetrable separation exists between the screen and life.” (Mbembe 2019, p. 14)

He describes how the culmination of technology and economy is beginning to take off at an ever-increasing speed, in both a creative and consuming process. Though even the near future is a murky prospect, we can study trajectory, and attempt to change the systems, policies, and people for the sake of creating a more emancipatory direction.

## Section 3: *On Constructing Tomorrow*

 In this section, I will discuss visions I find informative regarding how we ought to move into the future, as individuals and societies. Finally, I will outline a basic model for creating a social change, for the sake of spurring thought on the subject.

In *Demon Haunted World*, Carl Sagan discusses how science and democracy rely on a healthy balance between reification and skepticism. The reification is essentially the seeing of the world as meaningful and wonderful, the ability to look at the Grand Canyon or the night sky and be overwhelmed by the beauty of creation. The skepticism is an ability to think critically about world events and ideas, for the sake of avoiding propaganda, trickery, and snake oil sellers. He argues that a balance must be kept between these attitudes, because too much skepticism results in a world devoid of meaning or beauty, and too much reification results in one becoming a helpless sap.

In *Cosmopolitanism: Ethics In A World Of Strangers*, Kwame Appiah describes a vision of mutuality. He talks about an idea of trying to find the commonality between oneself and strangers. To facilitate this, he mentions how even though oneself may have little to nothing in common with an abstract category, any individual inherently has some commonality with any stranger they happen to meet. Going off one of his examples, I have little to nothing in common with Polish culture. However, if I were to talk to any individual pole, it's quite likely we could find something we both enjoy or care about. Whether that something is a favorite food, a kind of story, a clothing style, etc, there is almost certainly something that connects us even beyond our shared humanity.

Here, I will illustrate a potential roadmap to positive future change. Because of its relevance to Sagan, as well as importance in the world of today and of tomorrow, the topic here will be the health of democracy. By no means is this meant to be an exhaustive list of democracy issues, nor is it meant to solve the world's problems on its own. Instead it's an activity designed to allow consideration of large-scale problems, and the small-scale steps that need to be taken to alleviate them.

step 1: examine problems (example: poor democracy health)

Step 2: draw out a set of key issues. For democracy health, let's go with:

1. Emotions overpowering thought

2. Partisanship

3. Lack of nuance (everyones an expert in their head etc)

step 2: create a general plan that has ideas to help handle at least some of the direct problems. For this context, a plan centered on promoting better discourse and an increase in substantive interpersonal communication regarding politics would be one way to move forward.

step 3: break general plan down into immediate, short-term, medium-term, and long-term goals. For an immediate goal, one could set time aside to have a conversation where the goal is to better understand the point of view of someone they disagree with. A short-term goal could be to try to lead by example in one's own conversational spaces, setting an expectation of mutual understanding and substantive engagement (as opposed to personal attacks and empty rhetoric). A medium-term goal could be the attempt to create a space (online or in person) within which high quality discourse takes place, even among people with differing views. A long-term goal could be something more abstract and fluid, for it would probably depend on the progress and quality of the more immediate goals. For this scenario, something like making personal habit changes for the sake of better conversation would probably suffice at the start, with grander goals depending on context and power one has.

step 4: break those goals into actions you can do every day. A daily action usually becomes a habit, which carries a momentum of its own. Additionally, this helps assist oneself in overcoming decision making paralysis. Finally, it helps reign in scope so as to have achievable impacts. This kind of system could be made for almost any problem, large or small, personal or world-wide.

## Section 4: *Freedoms From...*

 A core conclusion of mine is the necessity to promote emancipation. What is emancipation? To me, one aspect of emancipation is a set of ‘freedoms from...’. I am here indebted to the tradition of classical liberalism, for I see a set of strong and upheld individual rights as a necessary foundation to any emancipatory project. Of particular relevance is the notion of a social contract, explained in great detail by figures such as Hobbes and Locke. At core, a social contract is the voluntary giving up of certain freedoms by a population, for the purpose of attaining the greatest freedom possible. For example, a population would give up freedom to murder, for the sake of gaining protection against being murdered (and thus increasing their freedoms overall). Overall, some kind of rights/obligations system seems necessary as a baseline in order to protect people from oppression.

## Section 5: *A Creative Dancing Star*

...one must still have chaos in [oneself], to give birth to a dancing star. (Nietzsche 2008, Prologue)

 To my eyes, one of the failures of classical liberalism is a lack of a life affirming goal. In trying to give absolute freedom to the individual, in some regards the tradition ends up failing to prescribe a life affirming goal. This issue is also reminiscent of part of Kundera’s *Unbearable Lightness of Being*. During the beginning of the text, Kundera describes lightness as freedom and meaninglessness, and heaviness as restriction and meaning. Absolute freedom brings with it absolute lack of consequences, and actions taken end up not mattering at that point. On the other extreme, absolute heaviness means complete lack of freedom. There will be consequences, but they will be ones that occur without any agency on the part of those affected. This relates to Nietzsche’s views on the necessity of restraint. Nietzsche says:

“...just remember the compulsion under which every language so far has developed strength and freedom: the compulsion of meter, the tyranny of rhyme and rhythm. Look at how much trouble the poets and the orators of every country have to go through!” (Nietzsche 2002, p. 77)

To Nietzsche, the process of creating great things necessitates self-restraint. If one gave themself the freedom to order their words with no grammatical structure, no matter how relevant their ideas were, they would be indecipherable. Nietzsche goes on to say

“But the strange fact is that everything there is, or was, of freedom, subtlety, boldness, dance, or masterly assurance on earth, whether in thinking itself, or in ruling, or in speaking and persuading, in artistic just as in ethical practices, has only developed by virtue of the “tyranny of such arbitrary laws.”’ (Nietzsche 2002, p. 77)

Our task ought not be to eliminate all restraints, for such a life would be as pointless as it would be absurd.

If holding oneself to a rhyme scheme can be said to be a self-imposed restriction, there is a flipside. One can attain a larger vocabulary, and so free themself to strive for greater poetry. In *Challenge, Enhancement, & Martial Arts,* Daniel Faggella examines connections between contemporary technology and striving to overcome obstacles. He says

“The value I’ve decided to explore here, in the context of human enhancement, is the concept of *challenge* in human life, and how it relates to productive and fulfilled living.” (Faggella 2019, p. 34)

Faggella describes how martial arts training in general, including his own, tends to bring with it a focus on individual striving and achievement. He says:

“Self-surpassing in physical and mental training is a hallmark of all martial arts.” (Faggella 2019, p. 34).

This transitions into an examination of transhumanism, and the ways in which our conception of challenge might be altered and advanced via technological enhancement to ourselves. Faggella says:

“Transhumanism is a philosophical movement that promotes the benefits of using science to enhance the human body and mind, often seeing this as the next stage in human evolution. This can include mechanical implants and cybernetics aimed at increasing the strength and agility of our bodies; medical and genetic enhancements aimed at producing longer, healthier lives (eventually, it is hoped, to include virtual immortality); and enhancements to our brains to improve our mental capabilities” (Faggella 2019, p. 34-35)

Technology promises potential for improvements in all aspects of the human condition.

This striving toward a technological apotheosis of the human ability resonates with Nietzsche’s concept of the Ubermensch (often translated as ‘overman’ or ‘superman’). Nietzsche says:

“Man is a rope stretched between the animal and the Superman—a rope over an abyss. A dangerous crossing, a dangerous wayfaring, a dangerous looking-back, a dangerous trembling and halting.” (Nietzsche 2008, section 4)

One of Nietzsche’s core projects is to push the creation of great works. As already mentioned restriction is part of the way there, but so is driving our ability to create to heights never yet seen. At points he gestures toward an end goal of someone truly creating meaning of their own, in order to quell nihilism forever. I see the process of meaning creation as less of an elitist endeavor, and believe that so many have the potential to create meaning and great works (as long as they are enabled by their conditions).

 Faggella says that a common critique of transhumanism is the notion that to gain from such enhancements would be something of an easy way out of our struggles, for those unwilling to put work into personal growth. He responds to claims like this by noting how people thought the invention of the car would make human beings lazier and softer. Instead, the car has enabled an immense increase of personal mobility. Faggella says that transhumanist technology would potentially allow similar growth in personal strength or focus, allowing us to better strive for growth and goal achievement, and enabling us to aim our goal sights higher than ever before. He says:

“If a philosopher were to enhance her memory and recall with some form of brain implant, this would not necessarily result in laziness in making the effort to remember. Rather, she might apply the same force of will to meet her goals, only with more capability - just as someone in a car can pursue her goals with greater mobility.” (Faggella 2019, p. 35)

He then describes the potential boons for something akin to the Matrix’s system of “downloading” skills into one's head. Instead of removing the point of progress or effort, he argues that such a technology would allow us to all begin our attempts at creation and growth at a higher starting point, perhaps raising skill potentials along the way.

Finally, Fagella transitions into examining what challenge has to do with living good lives. He says

“As human beings, we find happiness in challenge - in challenging ourselves, in overcoming obstacles, in achieving outcomes.” (Faggella 2019, p. 35)

Faggella describes going beyond hunter-gatherers to farming to cities, and how division of labor developed. Humans in cities didn’t stop striving to achieve, their challenges weren’t erased, rather the challenges changed form. In a contemporary setting, doing calculations via online spreadsheet doesn’t make us lazy, it allows us to crunch far more numbers far faster compared to someone working with an abacus and papyrus. Fagella describes how a minimization of meaningless and thoughtless tasks would enable us to spend more of our time and effort on the practices which give us purpose and meaning, rather than signing papers or doing taxes. Cognitive offloading is one form of transhumanism, where we put tasks such as checking the time into our personal computers rather than checking clocks ourselves. There are risks, as we have to retain an ability to check the work of our technology, lest we turn into prayer-singers on the altar of the machine world. Nevertheless, this notion of furthering our ability to challenge ourselves holds the potential for an alternative to the drug induced soporifics of *Brave New World*, or the thought policing referenced in *Psycho-Pass*.

## Section 6: *Sustained Tensions*

 I am left with two major tensions, ones I cannot immediately resolve. The first is between an urge to avoid silencing, and the existence of those who’s very speech is itself attempts to silence others (ex. Neo-nazis). The second is the tension between wanting to enable everyone to create, while also wanting to avoid the creation of discriminatory, silencing, and toxic systems. At some level, I think it is sufficient for the meantime to reject anything that is in itself an attempt to unjustifiably silence anybody, or dehumanize anybody. However, in a similar issue to what plagues free speech clauses, it isn’t immediately clear how to draw the line.

## Section 7: *Continued Exploration*

 Out of necessity, I have contained the scope of this project, avoiding certain relevant tangents. As a result, there is still a great deal of work to be done regarding explication of connections. Here I describe the places that most obviously need continued attention and scholarship.

**Democracy-** The foundations, spread, and maintenance of democracy require further analysis. Because of power structures and perverse incentives, I struggle to imagine a realistic non-democratic emancipatory future. However, as tyranny of the majority[[19]](#footnote-18) remains a constant threat to the silenced and oppressed, the problem goes deeper than leadership determination structures. Additionally, technologies such as the internet hold incredible emancipatory potential, with the ability to organize global social movements. However, such technology can cut both ways, and can be abused by authoritarian and repressive governments.

**Politics-** Whether it be polarized political atmospheres or gerrymandered electoral borders, there are a great many political situations that could be examined using the framework of my thesis. Further engagement with the political scene is important, at electoral, bureaucratic, and conceptual levels.

**Economy-** The dehumanizing forces of commodification and consumption need greater explication and examination. The universal acid nature of currency threatens to continually expand the standing-reserve mindset, as other value systems become more and more contingent on market value. We are enabled to reduce anyone and anything to a sum of cash. At the end of the day, are our economies serving us, or are we serving them? Who is raised up by economic gain, and who is forgotten or worse?

**Personhood-** My thesis has focused mostly on damage inflicted upon human beings, however we are not the only ones who matter. Animal rights may require an expansion of our conception of personhood, as conversations continue regarding the suffering of intelligent animals, from cows to cephalopods. On the horizon, questions of A.I intelligence and sentience are coming into view, and becoming harder to ignore.

**Fiction-** I only engaged with a few key pieces of fiction while writing this thesis, due to time constraints and other obligations in my life. Deeper dives into the fiction I did reference and the bringing of other relevant fiction into the conversation are both critical continuations of my project. Fiction gives the potential to construct a plausible future, in order to showcase critiques of our current global and local trajectory. In addition, it allows for the exploration of theoretical goals for social development and humanity as a whole. This creative potential is crucial to the creation of imaginative emancipatory projects overall.

**Expanding notions of legibility projects-** Topics such as race, gender, and broader culture could be examined via the lens of the legibility project. Poststructuralist grapplings with identity and social constructivism are relevant here, as are notions of constructing identities for the gaining of political recognition and rights.

##

## Section 8: *Conclusions, or Something More Than Hope*

 In conclusion, legibility projects have enormous potential to change the world, but that potential is easily directable toward oppressive and dehumanizing ends. Our relationships with government, technology, economy, and each other are some of the most influential aspects of our being, and require care and attention. We must be wary of border construction, both physical and social, for Othering creates the potential for massive damage to each other. In regards to goals, my first is the creation of a set of freedoms from, including freedom from violence, from oppression, from prejudice, from inequity. My second is the enablement of striving for great and life affirming creations. Together, these build my conception of emancipation. This project doesn’t end here. I hope that it spurs conversation, if only to some small degree. I have laid out a series of places this project can be expanded into, and I hope myself or others take the time and effort to do so. Together we can create an emancipatory future for everyone.

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1. This kind of statecraft involves maintaining borders, facilitating human travel, understanding and managing a state’s population, economies, and resources, and fulfilling the goals of government leaders. [↑](#footnote-ref-0)
2. *Seeing Like a State* has a section on Russian taxation under the tsars that helps get these points across in greater detail. [↑](#footnote-ref-1)
3. For more information on mapping and land usage, there is a great deal of scholarship on European ideas of static and parcelled land ownership, and how those ideas got transplanted to most of the world. Locke’s *Second Treatise on Government* lays out conceptions of land and land usage which are especially relevant for the United States and much of Europe. [↑](#footnote-ref-2)
4. This required a centralized state to even begin, as funding and skilled administrators would be needed, a legal system would be required to enforce the decisions made by the government, and the state would need the power to be able to coerce corporation from individuals on the ground (ones who were not usually keen on losing their traditions or autonomy). [↑](#footnote-ref-3)
5. Of particular importance here is the work of Foucault, especially *Discipline and Punish* [↑](#footnote-ref-4)
6. Scott goes into detail on additional examples, including soviet collectivization (chapter 6) and villagization of Tanzania and Ethiopia (chapter 7). [↑](#footnote-ref-5)
7. Scott notes that even today we don’t have a full grasp on all of the plants, animals, fungi, and environmental interactions of such forests. Such nuances were even more lost upon the scientific foresters of the past. [↑](#footnote-ref-6)
8. Heidegger is a contentious and complicated figure, and supported the Nazi party during the WWII era. He also wrote antisemetic notes in some of his journals. I strongly believe that he has made valuable contributions to philosophy, ones that are not entirely ruined or corrupted by his past and his context.

That said, when citing him, one must take care to avoid the toxic (especially fascistic) components of his intellectual career. [↑](#footnote-ref-7)
9. When I say endgame here, I mean a phenomenon or ideology being taken to its furthest extreme, and its logical conclusion if unresisted [↑](#footnote-ref-8)
10. A similar concept is described within Psychopass, involving the imagined abstraction not matching the imperfection of reality [↑](#footnote-ref-9)
11. A concept articulated by Deleuze and Guatarri in *1000 Plateaus*, one of its meanings is a direction and path in which to escape from domineering systems. [↑](#footnote-ref-10)
12. Tolerance of intolerance is itself a problem. A difficulty here is figuring out how to deal with someone such as a neo-nazi, without silencing or dehumanizing them. [↑](#footnote-ref-11)
13. As Scott describes, many legibility projects, especially of reconstructing type, result in the building of borders and the parceling of land (this depletes ‘commons’ ownership land and rights). [↑](#footnote-ref-12)
14. While Scott discusses this to some degree, there is further examination of the concepts of enclosure throughout sociology. In particular, Jerry Anderson, “Britain’s Right To Roam: Redefining the Landowner’s Bundle of Sticks,” and Anderson, “Comparative Perspectives on Property Rights: The Right to Exclude” cover a great deal in regard to the ‘era of enclosure’. [↑](#footnote-ref-13)
15. The song is “Out of Control”, by the band Nothing’s Carved In Stone. [↑](#footnote-ref-14)
16. The show is especially relevant when paired with Foucault’s *Discipline and Punish*, as well as with the idea of panopticon, however that is outside the scope of this thesis. [↑](#footnote-ref-15)
17. This paranoia was expertly parodied by the episode of the Twilight Zone named “The Monsters are due on Maple Street” [↑](#footnote-ref-16)
18. Much of this section is inspired by the episode of the podcast Weird Studies “Green Mountains are Always Walking (also from which I got the lens and terms of “Digital and Analog” [↑](#footnote-ref-17)
19. For more information on this subject, see Federalist Paper 51 [↑](#footnote-ref-18)