SURVEILLING THE COLLECTIVE BODY:
ALGORITHMIC AUTHORITY AND BIOPOWER UNDER A
STATE OF EXCEPTION

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Mediating the Bio-Political Body

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I.   Introduction

Harvard professor Latanya Sweeney noticed something strange when she was Googling herself a few years ago: She was being served with an advertisement from a company called Instant Checkmate with the tagline: "Arrested?" Having had no history of arrest or criminal behavior, she investigated further and discovered that Google's AdSense technology was delivering different advertisements depending on whether a name was black-identified or white-identified. In a world mediated by an algorithmic search engine, Google's technology was mirroring the racist stereotypes that already exist in society. In a paper entitled "Discrimination in Online Ad Delivery," Sweeney presents substantial evidence supporting the argument that Google searches involving black-sounding names were more likely to serve ads suggestive of a criminal record (2013).

In the digital era, we are witnessing the emergence of a new paradigm of the state of exception in which human populations are subjected to increasingly advanced surveillance technologies. Experiences like Sweeney's are becoming more common, since algorithms have allowed for the proliferation of advanced data gathering and analysis techniques in which cybernetic categories act as substitutes for individuals. Michel Foucault reminds us that power is not static; rather, it exists in an enmeshed network and is exercised by people or groups through continual acts of domination (1990). Biopower is produced when a population is confronted with biopolitizing techniques of a decentralized network of institutions, police, and surveillance and its various instruments and tactics. Algorithms serve as a form of biopolitics through which the collective body is surveilled and "normalized" under a state of exception. In this paper, I will ar-

gue that algorithmic authority allows for the exercise of disciplinary power in the form of selective surveillance, which effectively renders vulnerable populations more vulnerable.

II.   Literature Review

Before looking at algorithmic authority and contemporary modes of surveillance, I will outline some relevant concepts and definitions for this paper. Foucault's concepts of disciplinary power and surveillance will inform this paper's discussion of the ways in which modern-day techniques for governing human populations operate in an enmeshed network. Similarly, Giorgio Agamben's concept of *homo sacer* and "bare life" under a state of exception helps us see that the law does not apply evenly to all populations: some are above it, some are victimized by it, and others are simply excluded from it. Unpacking these concepts will become crucial for understanding the mechanisms through which disciplinary power is exercised in the modern era.

Disciplinary power is characterized by networks of power that are exercised through a disciplining of human bodies. Tracing the emergence of techniques of power in the 17th century, Foucault observes that two types of power are used by institutions to normalize human behaviors: sovereign power and disciplinary power. Sovereign power was historically wielded by the state or the sovereign, such as the king. Criminal behavior was punished in a highly public manner considered "passionate, violent, and repressive" with the intention of demonstrating the sovereign's power and discouraging deviant behavior (1977). Sovereign power tended to be centered on the individual body rather than the collective body, with punishments performed through decapitation, the gallows, or torture. In later centuries, the forms of punishment evolved to become more corrective and less public in nature.

The emergence of disciplinary power in the 18th century was characterized by the restoration of the criminal to normative standards. Discipline is a mechanism of power that normalizes the behavior of individuals in the collective body by regulating the organization of space, time, and people's movement and behavior. With population as the central concern of government, other institutions such as the military, police, and discipline, all become "instruments" or "elements" in the management of the population. Disciplinary power is decentralized into a network of institutions such as hospitals, asylums, prisons, army barracks, and schools, which constitute what Foucault calls a "disciplinary society" (1977). Power is exercised over the individual's soul by disciplining the body. These institutions are intended to carry out corrective forms of punishment to rehabilitate the individual and normalize human behavior in society.

Foucault underwent a shift in the emphasis of his theory during the 1970s, moving towards a definition of power that was more concerned with the "governmentality of population," the governing of a population through various circulatory mechanisms. Disciplinary power is applied not to "man-as-body" but to "man-as-living-being," addressing the population as a political and biological problem (Foucault 1990). Under these new power structures, the sovereign possesses the power of regularization, the power of "making live" (*faire vivre*) and "letting die" (*laissez mourir*). Foucault argues that our current society is characterized by a superimposing of these two technologies of power: power over the individual body and power over a mass of bodies. The first power is disciplinary and manipulates the body as "a source of forces that have to be rendered useful," while the second power "brings together the mass effects characteristic of a population and tries to control the random events that can occur in a living mass" (1990).

Put in its simplest terms, biopower is defined as social and political control over life. In his lectures in the 1970s, Foucault describes "a new technology of power" that acts as a control apparatus to manage "a global mass" by making use of a new set of instruments and mechanisms (1990). He posits that new procedures of power were introduced that were meant to discipline the human body to optimize its capabilities and extract its force while rendering it more docile. Biopower, he argues, is also meant to regulate a series of biological processes that would influence and control a population. For Foucault, biopower consists in "an anatomo-politics of the human body" and "a biopolitics of the population" (1990). Governments and networks of institutions exercise disciplinary power to control the reproduction rate, fertility rate, birth/death rate, public hygiene, vaccinations, sex education, sexual behavior, and medical care, for instance. These techniques of biopower are aimed at regulating the collective body rather than the individual body.

According to Foucault, the exercise of biopower is responsible for the creation of what he calls "docile bodies." Docile bodies, he posits, are well-suited to the new economic structure of the modern industrial age because they are easily organized in factories, military regiments, and school classrooms (1977). In order to render human bodies docile, institutions must be able to constantly surveil, observe, and record information about the bodies they control. In order to create docile bodies, institutions must also be able to ensure that the disciplinary individuality is internalized within the bodies being controlled. Foucault reminds us that disciplinary power is not static, nor does it emanate from a center of origin. Rather, power exists in an enmeshed network and is wielded by people or groups by way of "episodic" or "sovereign" acts of domination (1990). Power is dispersed and pervasive rather than concentrated, embodied, and enacted. Foucault writes, "Power functions. Power is exercised through networks, and individuals do not sim-

ply circulate in those networks; they are in a position to both submit and exercise this power" (2003). He argues that power is not applied to individuals; rather, it passes through them.

Punishment under disciplinary power becomes rationally organized through hierarchical observation. The systematic surveillance of individuals (or subjects) allows institutions to observe, correct, categorize, and normalize behaviors deemed deviant by society (Foucault 1977). By combining hierarchical observation and normalization, surveillance techniques effectively allow institutions to gain more knowledge and power over individual bodies. The resulting disjuncture between the data and the human body it represents is key to processes of social control. I will argue later in this paper that modern-day examples of security and surveillance techniques using algorithms are emerging as a new paradigm under the state of exception.

The panoptical structure of such institutions facilitates this type of surveillance. Jeremy Bentham describes the Panopticon as a circular building with an observation tower in the center surrounded by cells filled with occupants that are invisible to one another. It allows for constant observation characterized by an "unequal gaze," the constant possibility of observation (1977). The panoptical structure is most often associated with prisons, but this architectural style is used in many other institutions in which occupants are surveilled, including laboratories, schools, hospitals, shelters, or offices. Foucault calls the Panopticon a "marvelous machine" that "produces homogenous effects of power" through systematic ordering and controlling of human populations (1977). Disciplinary power, coupled with surveillance, generates a body of knowledge that defines what is considered normal or deviant behavior. Today, panopticism is no longer necessarily localized in a contained space, as it was with Bentham's prison model. Instead, surveillance is changing the traditionally defined space of the camp, as defined by Agamben (Douglas 2009).

Surveillance techniques operate in the tradition of Enlightenment-era rationality, with an emphasis on scientific inquiry and the systematic collection of information. Because social control through surveillance is exercised at a distance or as an automated part of the system, it is painted as a fundamentally scientific process. Foucault argues that "discipline tries to rule a multiplicity of men to the extent that their multiplicity can and must be dissolved into individual bodies that can be kept under surveillance, trained, used, and if need be, punished" (2003). Surveillance systems necessarily reduce individual humans to pieces of information that can be analyzed and sorted according to a set of criteria that enforce societal norms.

Agamben's discussion of the state and exception and bare life are crucial for understanding how modern-day surveillance techniques operate in a digital era. Foucault argues that biopolitics is produced when a population is confronted with biopolitizing techniques of a decentralized network of institutions, police, and surveillance and its various instruments and tactics. Agamben, on the other hand, tends to rely on a more traditional sovereign-people dialectic in his discussion of biopolitics. Building on Foucault's discussion of biopolitics, Agamben explores the concept of power through a discussion of the state of exception and bare life, which both find their realization in modern-day examples of the camp.

The state of exception is a concept developed by legal theorist Carl Schmitt to describe the sovereign's ability to transcend the rule of law on behalf of the public good. Typically instituted during wars or another state of emergency, the state of exception is a suspension of law, characterized by Schmitt as the sovereign exercise of the power of a decision that is not codified in the existing legal order (1922). For Agamben, the state of exception creates a threshold between law that is the norm (i.e. "judicial norms") and law that is not the norm and yet still is in

force. The subsequent blurring between fact and law creates a state of ambiguity in which "de facto proceedings, which are themselves extra- or anti-juridical, pass over into law, and juridical norms blur with the mere fact" (2005). Most notably, the state of exception opens up the possibility of bare life, a life that exists outside the law but is constantly exposed to violence (1998).

In *Homo Sacer: Sovereign Power and Bare Life*, Agamben defines bare life as life that may be killed but not sacrificed. He analyzes the mechanisms of power through the lens of the *homo sacer* ("sacred man"), an obscure figure in Roman law, described as "human life…included in the juridical order solely in the form of its exclusion (that is, of its capacity to be killed)" (1998). In Roman law, a man became *homo sacer* by committing a crime and being alienated from society. *Homo sacer* designated an individual who could be killed by anyone without repercussions because he had been banned from the juridical-political community. He no longer exists within Roman law but his life is deemed "sacred" so he cannot be sacrificed in a ritual ceremony. Since the *homo sacer* was ascribed a status that transcends human and divine law, he became a kind of "living dead." While even criminals could claim certain legal protections and formal procedures, the *homo sacer* man was rendered completely vulnerable and unprotected under the law.

Such bodies deemed *homo sacer* are reduced to *la vita nuda* ("bare life" or "nude life") under a state of exception. Unlike Foucault, Agamben defines the state of exception as the inclusion of life under the figure of exception. Bare life is that which is banished from the *polis*, a life that exists at the threshold between *zoe* ("bare life") and *bios* ("political existence"), banished from politics and yet included in its exclusion. In other words, bare life still exists within the force of law, "at once excluded and included, removed and at the same time captured" (1998).

The state of exception creates a space in which bare life is possible.

Confirming Foucault's diagnosis of "modern societies of control" (a term used by Gilles Deleuze), Agamben argues that biopower operates in physical spaces known as "zones of exception." Like Foucault, Agamben seeks to make visible the underlying structure of the space in order to better understand the present political matrix. The paradigmatic example of the camp is Nazi Germany, where the state of exception allowed for the creation of the camp as a permanent reality. Agamben describes the German concentration camps as "zones of exception" insofar as they were founded solely on the state of exception. For Agamben, the camp represented a significant turning point in which the state of exception was located in a physical space, rather than time. Described as "a piece of land placed outside the normal juridical order," the camp represents a new juridico-political paradigm in which "the norms become indistinguishable from the exception" (2004).

Like Foucault's discussion of the prison and panopticism, Agamben's analysis of the camp references an event that repeats itself on a daily basis. The camp is not just a physical entity surrounded by material borders and fences, but is is also a symbol of the threshold between bare life and political existence. As such, the "camp" denotes not only to Nazi concentration camps or modern-day ghettos, but every single space that systematically produces bare life. "The camp is the space that opened when the state of exception begins to become the rule," he writes (1998). For Agamben, all politics is already biopolitics. He claims, however, that it is only in modernity that the state of exception and rule become indistinguishable. The camp is "the hidden paradigm of the political space of modernity," he says. The ultimate power of the sovereign and the complete dissolution of democracy into totalitarianism, two systems that already have an

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"inner solidarity," occurs when the state of the exception becomes the rule (Douglas 2009).

The camp emerges as the realization of the blurring between violence and law. "The camp is a hybrid of law and fact in which the two terms have become indistinguishable," writes Agamben (2005). In seeking to understand the horror that occurred in Nazi concentration camps, many thinkers choose to ask how crimes of such atrocity could have been committed against other human beings. Agamben, however, argues that it would be more productive to investigate the judicial processes and deployments of power that allowed for the creation of a space in which human beings were so deprived of rights that any violence committed against them could not be considered a crime. While some philosophers and historians may insist that the Nazi concentration camps are a historical exception or phenomenon, Agamben argues that the camp and the production of bare life is a fundamental part of our contemporary political matrix. The camp is a materialization of the state of exception and the creation of a space in which bare life and juridicial rule become indistinguishable.

Like Foucault's discussion of the mechanization of surveillance, Agamben's examination of the state of exception helps us better understand the degree to which the violence of the Holocaust became a mechanized, automated procedure. The camp, argues Agamben, acts as a sophisticated apparatus that mediates and intensifies the violence committed against the *homo sacer*. The technologization of the Holocaust resulted in a system that allowed violence to be committed in a systematic manner. As previously discussed, surveillance systems lay claim to scientific objectivity and logical hierarchy. The opening of a state of exception in Nazi concentration camps allowed German leaders to reduce human bodies to pieces of information and commit violence against those bodies without being accused of crime.

During the Holocaust, the reduction of bodies to pieces of data occurred in a highly systematized, mechanized manner. Historians have always been puzzled by how quickly the Nazi regime was able to round up Jews and other targeted minority groups. In recent years, disturbing new information has surfaced that sheds light on how the Nazis were able to identify and locate European Jews with such speed and accuracy. In his book *IBM and the Holocaust,* Edwin Black explains how IBM technology was used to organize everything in Nazi Germany, from the identification of Jews in censuses and registrations, to the organizing of concentration camp slave labor (2001). Although computers did not exist in the 1930s, IBM's Hollerith punch card technology did exist and was used extensively by the Third Reich for the purpose of mechanizing violence during the Holocaust. The IBM punch card and card sorting system, considered a precursor to the computer, was used extensively throughout the Holocaust.

According to Black, IBM and its German subsidiary custom-designed complex machines and leased these machines out to the Nazis, becoming the single source of the billions of punch cards required to carry out the extermination process. "People and asset registration was only one of the many uses Nazi Germany found for high-speed data sorters," he writes. "Food allocation was organized around databases, allowing Germany to starve the Jews. Slave labor was identified, tracked, and managed largely through punch cards. Punch cards even made the trains run on time and cataloged their human cargo" (2001). Over 2,000 multi-machine sets were established throughout Germany and thousands more in German-dominated Europe, with card sorting operations installed in every major concentration camp. IBM Germany used its own staff and equipment to design, execute, and supply the technology needed to carry out the mass extermination of Jews.

IBM's strategic alliance with Nazi Germany has troubling implications for the future of computing technology. Whether or not the Holocaust would have occurred without IBM, it is clear that IBM's technological assistance determined the extent to which identification and extermination occurred in the concentration camps. Furthermore, Black explains how the corporate collusion with the Third Reich was structured in such a way that IBM could maintain plausible deniability through the use of oral agreements, undated letters, and Geneva intermediaries (2001). As stated earlier in this paper, the state of exception as described by Agamben creates a threshold between judicial norms and law that is not the norm and yet still is in force. The state of exception that existed under the Nazi regime created a space in which human bodies were rendered *homo sacer,* subjecting them to violence that was neither legal nor extra-legal. The blurring between law and fact during a state of exception is exemplified in the partnership between IBM and Nazi Germany.

Although modern systems of technological surveillance differ significantly in both intent and structure from the IBM technology employed during the Second World War, both systems require that social actors and behaviors be reduced to data that can be analyzed and sorted according to a set of seemingly objective criteria. While the functionality of different kinds of camps may vary, the mechanisms of power that employ a surveillance structure are similar. In the rest of this paper, I will argue that algorithm-based technology is employed in contemporary society under a state of exception to collect information about vulnerable populations, rendering them more vulnerable. In this way, algorithmic authority acts as a biopolitical force that regulates and controls human bodies.

III.   Main Argument

The emergence of algorithmic authority has allowed for increased surveillance of populations with the intent of monitoring and regulating their behavior. For the purpose of this paper, I am defining algorithmic authority as the power of algorithms to influence which information is considered accurate and true. Algorithmic authority is the decision to regard the process of extracting value from diverse sources as authoritative. Because algorithms lay claim to the same Enlightenment-era rationality and objectivity that are also key components of systematic surveillance outlined by Foucault, the information yielded by algorithms is treated as accurate and unbiased. Modern systems of technological surveillance tend to reduce social actors and behaviors to data that can be analyzed and sorted according to a set of criteria with claims to objectivity.

Algorithms play an increasingly dominant role in making decisions about individuals and predicting their behaviors in a modern-day context. With the rise of neoliberalism, surveillance technologies have come to rely on algorithms to normalize populations by combining "elements of social control" with "the privatization of public goods and services" (Monahan 2010). The aim of such techniques is to control for potentially random or aleatory events in the "global mass" as described by Foucault. Because surveillance encourages an algorithmic subjectivity toward subjects, it normalizes monitoring practices that effectively reaffirm preexisting patterns of segregation. We employ algorithms to monitor and manage populations under the assumption that such algorithms are devoid of bias.

Algorithmic authority can therefore be viewed as a new tool through which institutions

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wield disciplinary power over human bodies. Like the "unequal gaze" found in Foucault's Panopticon and IBM's punch card technology that was employed during the Second World War, algorithms necessarily reduce human bodies to pieces of information that can then be analyzed and translated into disciplinary action. In his essay "Probing the Surveillant Assemblage," Sean P. Hier suggests that modernity has "ushered in the proliferation of information and data gathering techniques" that "operate to break the human body into a number of discrete signifying data flows" (2003). The subsequent biopoliticization of populations creates a disjuncture between the data and the living body it represents. These "assemblages of surveillance" (a term used to describe the rhizomatic expansion of surveillance) engender a relation in which the algorithm functions as a surrogate for the human body (2003).

When data is permitted to act as substitute for human bodies, it becomes much easier to design and implement surveillance systems aimed at "normalizing" and influencing human behavior. Contemporary surveillance practices increasingly rely on algorithms to formulate categorical images or risk data profiles which "render otherwise opaque flows of information comprehensible." In this way, data simulations are not simply representational, but they involve a more complex logic that facilitates the making of discriminations and categories among divergent populations. As such, contemporary systems of surveillance are not concerned with the embodied individual; rather, they are concerned first and foremost with the categorical profile of the collective body (Hier 2003).

Foreign visitors and immigrants are targets of selective surveillance by U.S. governing bodies under a set of laws aimed at bolstering national security and eliminating foreign threats. Emblematic of the state of exception outlined by Agamben, the U.S. Patriot Act was introduced

after the terrorist attack of 9/11 with the intent of boosting government surveillance of people suspected to be engaging in terrorist-related activities. According to Foucault, governmentality is concerned with managing the state according to a biopoliticization of the population. Increasingly, these mechanisms for control are exerted with the intent of governing a mass of bodies and operates as a form of biopower. The U.S. government employs techniques for monitoring and surveilling the bodies of foreign visitors through the Patriot Act and other laws enforced under a state of exception. Agamben experienced the implications of "bio-political tattooing" firsthand in 2004 when he was told that in order to obtain a U.S. visa to teach a course at New York University he would have to submit himself to fingerprinting procedures. In a piece published in *Le Monde*, Agamben explains why he refused to comply:

> There has been an attempt the last few years to convince us to accept as the humane and normal dimensions of our existence, practices of control that had always been properly considered inhuman and exceptional. Thus, no one is unaware that the control exercised by the state through the usage of electronic devices, such as credit cards or cell phones, has reached previously unimaginable levels (2004).

Agamben goes on to explain that the electronic filing of finger and retina prints required by the U.S. government are ways in which the state registers and identifies naked life, an excuse for manipulating bodies under the justification of strengthening national security. The Patriot Act and NSA surveillance measures are very visible examples of this exercise of disciplinary power through state surveillance. Governments rely on the routine categorization and analysis of human populations in order to regulate human behavior.

It is important to reiterate that surveillance technologies in contemporary society are wielded by a broad range of institutions, companies, and individuals, not just governments. Foucault's discussion of "episodic" acts of domination reminds us that power is not static, nor does it

emanate from a center of origin; rather, power exists in an enmeshed network. While we are most familiar with the methods used by state actors to surveil populations, myriad social actors have an incentive to understand and influence the behavior of huge masses of people. Marketers increasingly use algorithms to understand and predict consumer behavior by categorizing groups of people. In the past, consumers were categorized based on demographic and geographic data available in the census. As marketers moved online over the past two decades, however, they were able to use data from search queries to build user profiles on top of these basic categories. The subsequent construction of "databases of intentions" help marketers understand general trends in social wants and needs and consequently influence purchase decisions (Cheney-Lippold 2011). By categorizing groups of people, marketers inadvertently reinforce existing stereotypes about such groups, which is itself a form of biopower.

Regimes of surveillance are often directed at a variety of "socially constituted risk groups," including the poor, people of color, prison populations, immigrants, women, and foreign visitors, among others. These human populations are rendered bare by a network of comprehensive surveillance technologies that seek to collect information, categorize, and influence behavior. In the digital era, the most sweeping surveillance technologies continue to be designed and tested in communities considered "low rights environments." These populations might be considered "cybervulnerable" because they are effectively excluded from rights that other populations possess.

In his essay "A New Algorithmic Identity: Soft Biopolitics and the Modulation of Control," John Cheney-Lippold argues that "the capacity for cybernetic categorization to regulate certain categories' meaning according to algorithm marks a move away from offline stereotypes

and into a form of statistical stereotyping" (2011). By clustering groups of people according to purchase preferences, these algorithms reinforce existing societal stereotypes about populations that are already susceptible and exposed. In order to govern populations according to Foucault's prescription for social control, biopower requires dynamic, modular categories that have the ability to adapt to the dynamic nature of human populations. In this system, the personal identity of the individuals matters less than the categorical profile of the collective body. Cheney-Lippold puts it this way:

> Algorithm ultimately exercises control over us by harnessing these forces through the creation of relationships between real-world surveillance data and machines capable of making statistically relevant inferences about what that data can mean. And the processes of soft biopower work in a similar fashion, allowing for a modularity of meaning that is always productive—in that it constantly creates new information—and always following and surveilling its subjects to ensure its user data are effective (2011).

It is important to note that intentionality is not a necessary condition for surveillance. Just because a social actor doesn't have a malicious intent, it doesn't mean he or she isn't exercising biopower. "Surveillance is about control," writes Jill Fisher. If a system can monitor groups to regulate practices, then "social control and thus surveillance are occurring" (Monahan 2010). With the construction of categories, we see how biopolitical forces seek to control random events through a series of practices that divide and categorize. As described by Agamben earlier in this paper, the camp is a space in which violence is repeated on a daily basis under a state of exception. Indeed, surveillance does not apply evenly to all populations: some are above it, some are victimized by it, and others are simply excluded from it.

The poor have historically been subjected to processes aimed at social control, rendering them "bare" in the sense that they are exposed to biopower in the form of selective surveillance.

The use of predictive policing by the NSA and police departments hones in on networks of people associated with a particular target, subjecting vulnerable populations to increased surveillance. Poor women of color, especially, are often the first targets of new surveillance systems. State-sponsored video surveillance in public spaces, for instance, tends to focus on neighborhoods dominated by poor minorities. Cameras are most often installed in areas devoted to public transportation, such as train and bus platforms, so that traffic engineers can actively monitor transportation flows in what are called intelligent transportation systems (ITS). Because the surveillance system prioritizes car traffic over pedestrian traffic, the technology reinforces existing modes of inequalities (2010). Most notably, algorithm-based surveillance has played a role in furthering processes of spatial and social segregation. In these situations, algorithmic authority functions as a tool that can be used by various institutions to exercise disciplinary power.

Hospitals and health clinics have historically employed surveillance systems of sorts to monitor the health habits and behaviors of patients. In one infamous case, a hospital in South Carolina instituted a program in which women who were undergoing obstetrics care in the Medicaid maternity ward were subjected to involuntary drug testing and were arrested if they tested positive for cocaine use (Monahan 2010). More recently, the Obama administration pledged $19 billion to fund health information technology (HIT) systems, tracking systems that use radio-frequency identification chips to track the movement of people and medical equipment. Once the hospital is equipped with the technology, the movement (or nonmovement) of patients can be monitored through an automated system of responses (2010).

Welfare recipients have long been subjected to moralized regimes of surveillance. Throughout the U.S., welfare "client information systems" are used to create detailed profiles of the income and spending patterns of welfare recipients, most of whom are women. The Welfare

Reform Act of 1996 mandated the use of "electronic benefit transfer" (EBT) systems for welfare and food stamp recipients, an example of the impositions of database surveillance on poor women (Monahan 2010). Automated systems are programmed to flag purchases that require further scrutiny from case workers, ending in the possible penalization of the recipient. Similarly, the Canadian province of Ontario in the 1990s implemented the Client Registration System-Enhanced (CRIS-E), a high-tech surveillance system aimed at monitoring the behavior of 'legitimate' welfare recipients, that brought together state-wide databases to manage, evaluate, and administer welfare allotments (Hier 2003). The system was a way for state actors to morally regulate the activities of poor single mothers, lives that could be considered "bare" according to Agamben. Though operating under the illusion of algorithmic objectivity, the system simply re-asserted existing myths surrounding single mothers that cast welfare recipients as lazy and criminal. This type of electronic surveillance can have serious and devastating consequences for those subjects who are being monitored.

The digital era of online advertising has ushered in a new type of surveillance aimed at maximizing profits by serving up advertisements based on modular, elastic categories. Through use-patterns online, an individual may be categorized based on her gender, her race, her age, her consumption patterns, her location, her peers, and any number of relevant groupings. Rather than relying on static census data, online users are categorized through "a process of continual interaction with, and modification of, the categories through which biopolitics works" (2001). Medical services and health-related advertisements might be served to that individual based on that categorization process, meaning that those who are categorized as Hispanic, for instance, might not experience the same advertisements and opportunities as those categorized as Caucasian. The

construction of such categories is itself a biopolitical effort and reinforces existing stereotypes, rendering vulnerable populations more vulnerable.

Foucault argues that surveillance exerts a homogenizing, "normalizing" force on individuals who are being monitored. When algorithms are employed in systems of selective surveillance, the personal identity of an individual matters less than the categorical profile of the group as a whole. Such biopolitical forces produce what he calls "docile bodies," or what Agamben might call *homo sacer*. The use of algorithmic authority as a tool to regulate human behavior exercises a biopoliticizing force under a state of exception. Such forces mediate and intensify the violence committed against populations that are already vulnerable.

IV.   Conclusion

As digital surveillance techniques have advanced over the past several decades, vulnerable populations have been increasingly subjected to "normalizing" biopolitical forces with some regularity. While disadvantaged groups have always been targets of selective surveillance, advanced algorithm-based technology has allowed a disparate network of institutions, businesses, and state actors to monitor and influence the way humans behave by grouping human populations according to modular categories. Such categories mirror and perpetuate modes of oppression that already exist in society. Under a state of exception, algorithmic authority allows for the exercise of disciplinary power in the form of selective surveillance of vulnerable populations.

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