

PREDICTIVE POLICING AND THE CARCERAL STATE:
A COMPARATIVE CASE ANALYSIS OF PALANTIR IN NEW ORLEANS AND THE
STRATEGIC SUBJECT LIST IN CHICAGO

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Author's Declaration

I, the undersigned Therese Murphy hereby declare that I am the sole author of this thesis. To the best of my knowledge this thesis contains no material previously published by any other person except where proper acknowledgement has been made. This thesis contains no material which has been accepted as part of the requirements of any other academic degree or non-degree program, in English or in any other language.

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Abstract

Police departments across the United States use predictive policing—algorithm-based analytical tools aimed at forecasting crime—to maximize scarce resources and prevent crime. However, these programs raise significant legal and ethical concerns, including lack of privacy, transparency, accountability, and oversight. Using the case studies of Palantir in New Orleans and the Strategic Subjects List in Chicago, this thesis identifies the emergence of a new byproduct of predictive policing: the surveillance city. It examines the morality and legality of this new development, analyzing two notable issues—racial bias and the democratic deficit. It subsequently provides recommendations on how to mitigate the effects of the surveillance city through sustained public engagement through a coalition-based civil rights movement for the digital age. It also seeks to explain some of the developments in predictive policing and the impediments to further reform using a carceral state framework, which has not previously been done in the academic literature.

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Abbreviations

ACLU: American Civil Liberties Union

CPD: Chicago Police Department

LAPD: Los Angeles Police Department

NOLA: New Orleans, Louisiana

NOPD: New Orleans Police Department

SNA: Social Network Analysis

The Fourth Amendment: the Fourth Amendment of the United States Constitution, which protects against unreasonable searches and seizures

U.S.: United States

Introduction

Predictive policing, or the use of algorithm-based analytical tools to forecast and prevent crime, is employed by police departments across the United States to maximize scarce resources and take a proactive approach to crime. In the age of big data, this software is able to conduct advanced pattern recognition at incredible speeds, efficiently identifying crime trends and assessing risk. However, predictive programs provoke significant legal and ethical concerns over issues such as data privacy, unwarranted search, racial profiling, accountability, transparency, and oversight. The enormity of data available through this technology makes it vulnerable to government overreach—resulting in the emergence of surveillance cities without public approval. Further, the secretive nature of these programs creates a democratic deficit, in which citizens are unable to meaningfully contribute to the algorithms or implementation based on community values. Predictive programs, as they currently stand, use their lack of transparency to perpetuate a system of control; thus, a new movement of public engagement must emerge to instill accountability, oversight, and racial justice in predictive policing.

The thesis begins with an overview of relevant concepts, theory, and literature, followed by a description of the case study methodology. It is followed by a chapter on the American carceral state, which provides a theoretical framework for the case study analysis. Carceral state theory views the criminal justice system as a mechanism of social control, and thus accounts for some of the intransigence on the part of law enforcement agencies to rectify the existing ethical and legal challenges associated with predictive programs. The analysis then proceeds to a discussion of the two case studies: Palantir in New Orleans and the Strategic Subject List in Chicago. Ethical and legal challenges associated with the programs are explored in depth, as are their broader contribution to the advent of surveillance cities in modern America. The paper concludes with an analysis of the development and implications of the surveillance city. It

ultimately recommends increased public engagement via a coalition-based civil rights movement as a tool for keeping predictive programs accountable, transparent, and racially just.

This analysis seeks to move beyond typical measures of predictive effectiveness, which focus on immediate preventive capacity, by assessing these programs in light of their transparency, morality, legality, and role within the larger carceral state. Research on the topic has been conducted fragmentarily, with immediate effectiveness studied in academic journals, legal challenges discussed in law reviews, and concerns of ethicality, transparency, and community engagement left to news articles. If society is going to deprive an individual of their freedom (not to mention, in many states, their rights to voting, government housing, public benefits, and sustainable employment even after they are released), scholars need to critically engage with not just what these programs are doing, but how they are doing it. This project seeks to bridge these different strands of literature and examine the predictive programs in a holistic manner. It also seeks to explain some of the developments in predictive policing and the impediments to further reform using a carceral state framework, which has previously not been done in the academic literature.¹

¹ While this argument has not been made in academic literature, as far as I know, it has undoubtedly been made by racial justice organizations and activists, who may be excluded from academic literature or may choose not to publish their work in that format.

Chapter 1: Literature Review, Subject Overview, and Methodology

Due to the lack of academic literature on the subject, many literature reviews attempt to adapt articles from other fields—such as behavioral economics, epidemiology, and psychology—to explain developments in predictive policing. This results in a highly technical and somewhat contrived review of the literature, and fails to provide a substantive overview of the field. In order to acquaint readers with this subject, the following chapter provides a summary of the key topics, theories, and arguments in this burgeoning field. It concludes with a description of the methodology used for the case study analysis of Chicago and New Orleans’ predictive policing programs.

1.1 Proponents of Predictive Policing

Proponents of predictive policing tout its superior resource allocation, risk mitigation, and public safety capabilities. Pointing to centuries of reactive policing, they convincingly make the case that a shift to a predictive orientation is long overdue. Quick to distance modern programs from the dystopian deep state portrayed in the 2003 blockbuster *Minority Report*, they argue that, when applied correctly, predictive policing can be conducted ethically, legally, and without bias.

In the most comprehensive resource on predictive policing to date, *Predictive Policing: The Role of Crime Forecasting in Law Enforcement*, Rand Corporation researchers provide an overview of the history, theory, and models of crime forecasting, ultimately arguing that all police departments can gain a tactical advantage through the application of predictive technology. They define predictive policing as “the application of analytical techniques—particularly quantitative techniques—to identify likely targets for police intervention and prevent crime or solve past crimes by making statistical predictions” and create four classifications of its methods: prediction of (1) crime location, (2) offenders, (3) victims, (4) perpetrators of unsolved crimes (Walter L. Perry et al. 2013, 1–2, 8). The authors are confident that with support from department management,

dedicated resources, accountability mechanisms, and positive community relations, predictive policing can be employed effectively (Walter L. Perry et al. 2013, 135).

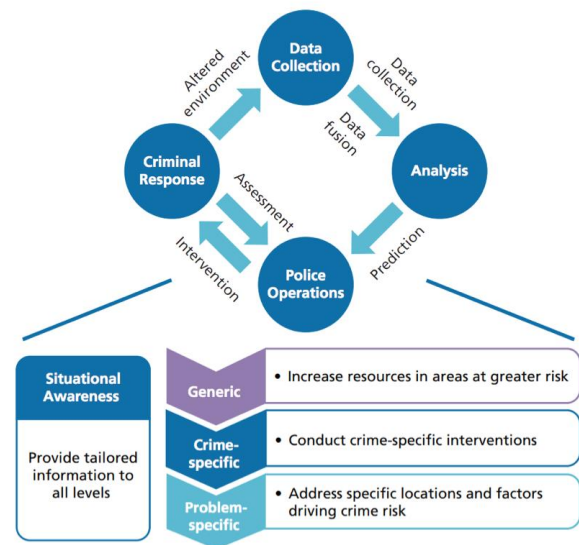
The most important element of a successful program is not the level of sophistication, but the human analysis and implementation that occurs once the intelligence is gathered. The Rand researchers created a “comprehensive business process,” detailed in figure 1, for the best-practice application of predictive policing programs

(Walter L. Perry et al. 2013, xviii). Notably, this is an adaption of a concept developed for sharing and operationalizing counterinsurgency intelligence—a common theme in the field (Walter L. Perry et al. 2013, 129). Much of the technology and heuristics behind predictive policing were designed to be implemented in wartime, yet are deployed in domestic contexts. This is also seen in the Social Network Analysis

case study, discussed in chapter five, when the New Orleans Police Department (NOPD) used Palantir’s software designed to predict improvised explosive device placement in Iraq and Afghanistan. The use of wartime risk assessment models in peacetime poses a myriad of ethical and operational concerns, which will be evaluated further in chapter three.

Proponents also point to evidence that predictive programs are not racially biased. A randomized control experiment of Los Angeles Police Department’s (LAPD) predictive program—considered America’s first predictive policing effort—found no difference in arrest rates based on racial-ethnic group (Brantingham, Valasik, and Mohler 2018, 1). However, it should be noted that they limit the generalizability of their findings to the LAPD’s place-based Predpol program (Brantingham, Valasik, and Mohler 2018, 5).

Figure 1
The Prediction-Led Policing Business Process



Source: Rand Corporation, *Predictive Policing: The Role of Crime Forecasting in Law Enforcement*

1.2 Opponents of Predictive Policing

Opponents of predictive policing cite their concerns about unwarranted search and seizure, lack of due process, poor data protection, and the potential for profiling disguised by the presumption of data impartiality. Further, they argue that the lack of privacy, transparency, and accountability in this software makes its use incompatible with a free and democratic society.

The American Civil Liberties Union (ACLU) along with many racial justice and open technology organization oppose the current use of predictive policing due to its infringement on civil liberties, disregard for data privacy, and racial profiling. They claim the algorithms are fed data collected in a racially biased manner and note that predictive policing programs do not predict crime; rather, they predict law enforcement response to crime (ACLU et al. 2016). Further, they cite the lack of transparency and accountability as major concerns, and argue that this technology further distances the police from communities—distilling people into data points at a time when police and their communities are as divided as ever (ACLU et al. 2016). The coalition concludes with a recommendation to use this software to monitor police behavior rather than criminal activity (ACLU et al. 2016).

Lyria Bennett Moses and Janet Chan explore some of the limitations of predictive policing in their article “Algorithmic prediction in policing: assumptions, evaluation, and accountability.” They take a neutral stance on the practice, but caution against too much optimism regarding predictive capacity and argue for the adoption of better accountability measures. By critically engaging with seven underlying assumptions of predictive policing, they question the impartiality of data, the reliance on historical trends in current algorithms, and the primacy of law enforcement tactics in combatting crime (Bennett Moses and Chan 2016). Data, though seemingly objective, is always informed by the biases of its collectors, algorithm developers, and analysts. As Moses and Chan explain, “the gap between crimes committed and crimes reported is not random but systemic” (Bennett Moses and Chan 2016, 5). Crime data is not gathered randomly: it is based upon police observation, which is naturally limited to areas police are assigned to, and civilian

reports, which are circumscribed by previous interactions with police (Bennett Moses and Chan 2016, 4–5). This creates racially biased feedback loops, whereby areas of historic crime are heavily policed, resulting in inflated crime figures relative to less policed areas. This is especially true in regards to nonviolent crimes, which may be forgiven in privileged areas and heavily punished in socioeconomically deprived neighborhoods due to the legacy of “broken windows” policing.²

On the other hand, racial minorities are less empowered to report crimes due to past interactions with police, while white, wealthy individuals feel overly empowered to call the police on racial minorities. This phenomenon was exemplified a multitude of highly publicized examples in 2018, including a white student calling the police on a black student napping in a Yale common area (Caron 2018) and a barista calling the police on two black men waiting for a friend at a Philadelphia Starbucks (Dias, Eligon, and Jr 2018). These incidents, though only two of thousands, illustrate the vast disparity in relations between white and black communities and the police. Given these disparate realities, the use of historic crime data to predict future crime must be highly scrutinized. Chen and Moses demonstrate that police officers have great discretion in how to classify and report crime, and internal biases may lead them to upgrade crimes in severity (Bennett Moses and Chan 2016, 5–6). These biases become self-perpetuating when the data is used to defend increased patrols in an area or to create an algorithm that predicts future crime. Finally, they question the primacy of police tactics in preventing crime, pointing to the environmental nature of crime and the lack of research on the efficacy of altering the location or intensity of police deployment as a means of preventing crime (Bennett Moses and Chan 2016, 8–10).

1.3 Legal Restrictions

As fairly new technology, predictive policing has not yet been adjudicated by the American courts. Legal scholar Andrew Guthrie Ferguson examined numerous anonymous tip, known

² “Broken windows” theory advocates for heavy policing of nonviolent offenses to prevent violent crime through the restoration of community faith in a system of law and order (James Q. Wilson and George L. Kelling 1982).

informant, and profiling cases as proxies of data-driven leads to conclude that predictive algorithms must produce tips that are *accurate* and *reliable* if they are to meet the Supreme Court's standards for reasonable search and seizure (Ferguson 2012, 264). Though predictive technology has not yet been challenged in court, there are three influential cases that may illuminate future decisions on the matter: *Illinois v. Wardlow*, *United States v. Jones*, and *United States v. Miller*. These cases define the boundaries of constitutional protections against unreasonable search and seizure, as defined in the Fourth Amendment.³ *Illinois v. Wardlow* (1999) expanded the scope of reasonable search by allowing law enforcement-determined "hotspots" to constitute one of the criteria for a reasonable search. Hotspots, or designated high-crime areas based on historical crime trends, do not justify search and seizure alone, but they lower the standard. The Court ruled that when a hotspot is combined with other observed suspicious activity, such as "unprovoked flight," there is grounds for reasonable search (Ferguson 2012, 300). Conversely, *United States v. Jones* (2012), limited law enforcement rights to search and seizure, ruling that the covert installation of a GPS tracker in a suspect's car was considered an unwarranted search (Walter L. Perry et al. 2013, 83–34). This was a hallmark victory for personal privacy in criminal investigations. Finally, *United States v. Miller* (1976) "held that there is no reasonable expectation of privacy when it comes to information held by a third party" (Walter L. Perry et al. 2013, 84). Accordingly, private companies that license predictive programs are may not be required to keep the data private, allowing the potential exploitation of public data for commercial use. Citizens have an expectation of privacy when it comes to law enforcement data; this should extend to all local government contractors, regardless of the the terms of a lease. Even in 1976, this case led to grave concerns of government tyranny through the dissolution of citizens' Fourth Amendment rights to privacy—as legal scholar Patrick Moore asked in 1977: "But as the files are being quietly examined by those seeking not

³ The Fourth Amendment to the United States Constitution states: "The right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated, and no Warrants shall issue, but upon probable cause, supported by Oath or affirmation, and particularly describing the place to be searched, and the persons or things to be seized." (U. S. Constitution amend. IV).

only evidence of crime, but also proof of deviance from social or political norms, or information for private purposes either sinister or innocuous, we may well wonder who will watch the watchers?” (Moore 1977, 650).

1.4 Criminal Theories Underlying Predictive Software

One cannot understand predictive policing programs without understanding the criminology theory that underlies them. The most commonly employed theories are *Rational Choice Theory*, *Patterning Theory*, and *Near Repeat Victimization Theory*.

Rational Choice Theory assumes that crimes are committed by choice with a relatively clear mind. Opportunities to commit crimes are evaluated based on a rational cost-benefit analysis, resulting in a conscious choice to act based on the benefit it will bring (Mangai Natarajan 2016, xx–xxii). Thus, rational choice theory views crime as the convergence of opportunity, benefit, and choice (Mangai Natarajan 2016, xx). This theory disavows crimes of passion, arguing that spontaneity does not imply irrationality (Mangai Natarajan 2016, xxi). Rational Choice Theory is a cornerstone of predictive policing, which uses police presence to deter crime by altering the potential offender’s cost-benefit calculus. Predictive policing also assumes that crime is committed by choice, rather than mental illness, environmental conscription, or inherent deviance.

Crime Patterning Theory asserts that crime is not evenly dispersed amongst place, time, or people. Developed by Patricia and Paul Brantingham in the 1980s and 1990s, Crime Patterning Theory builds on *Routine Activity Theory* to argue that crime occurs in patterns because individuals and society are organized by routines (Clarke and Felson 1993, 264–71). These routines dictate the location and time of crimes both on a micro level and a macro one; for instance, there may be an increase in graffiti near a high school each Friday at 4 p.m. This is not a random occurrence; it is driven by the convergence of school getting out, the feeling of freedom from an upcoming weekend, the low risk from a crowd of people, and factors such as proximity of an alley, stores, or other features of the environment. Patricia and Paul Brantingham take this further by arguing that

criminals develop templates for their ideal crime environment⁴ based on their everyday schedules—often selecting locations and victims on the periphery of their routines so as to avoid detection (Patrica Brantingham and Paul Brantingham 1993, 10). Thus, geographic, seasonal, and temporal trends in crime can be explained by a human drive for familiarity and comfort, even during the commission of deviant acts. Predictive policing uses spatiotemporal crime patterns to predict the time and location of future crime, deploying increased resources accordingly.

(Near) Repeat Victimization Theory accounts for the empirical trend that victimization (whether of people or places) is not random, but clustered. Repeat Victimization Theory asserts that the same individuals and places will be victimized multiple times, while Near Repeat Victimization Theory claims that one crime predisposes the surrounding area and populace to future crimes (Farrell and Pease 1993). This phenomenon is supported by evidence, especially for burglary, shootings, and vehicle crimes (Chainey and Silva 2016, 1). Victimization doubles a person's risk of repeat victimization (Chainey and Silva 2016, 2), and the subsequent crime tends to occur soon after the original (Farrell and Pease 1993, 8). Repeats and Near Repeats are commonly integrated into predictive algorithms, both for predicting potential victims and locating high risk areas. This has been a police practice for decades, but the use of technology allows for better tracking of Repeat/ Near Repeat crimes and allows for superior pattern detection in determining repeat clusters.

1.5 Effectiveness

In addition to the four types of predictive policing, there are four predictive techniques: classical statistic techniques such as regressions, simple methods such as checklists or indexes, complex applications such as data mining, and tailored methods such as heat maps (Walter L. Perry

⁴ Brantingham & Brantingham use the term “environmental backcloth” to describe the ideal crime environment, which includes an individual's dynamic interactions with the social, economic, political, and physical attributes of their surroundings (Patrica Brantingham and Paul Brantingham 1993, 7). The Brantinghams reject physical determinism and attribute crime to a broader ecology (Patrica Brantingham and Paul Brantingham 1993, 4).

et al. 2013, 18), as well as innumerable software programs and levels of adherence to the suggestions provided. The significant variance amongst programs results in divergent levels of success between programs and likely precludes an accurate national assessment. To date, a nationwide evaluation of the effectiveness of predictive policing has not been conducted. However, research of individual programs shows mixed results.

An evaluation of Shreveport, Louisiana's predictive program conducted by RAND corporation under a National Institute of Justice grant found that the predictive model had no effect (Hunt, Saunders, and Hollywood 2014, xiii). The Shreveport program sought to predict property crime using indicators such as graffiti, public consumption of alcohol, and dilapidated buildings (Hunt, Saunders, and Hollywood 2014, ix). These indicators were used to map predicted hot spots, to which extra police officers were deployed to conduct special operations aimed at preventing property crime (Hunt, Saunders, and Hollywood 2014, xi). In the control group, police officers conducted property crime-based operations in hot spots derived solely from recent property crime—a conventional police method without any advanced predictive capacity (Hunt, Saunders, and Hollywood 2014, xi). Researchers posited that the lack of an observed effect could be attributed to poor implementation, low statistical power, or theory failure (Hunt, Saunders, and Hollywood 2014, xiii). While uneven implementation is treated as a problem in this study, it could conversely be viewed as a success; it is important that police officers feel empowered to question the predictions and tactics recommended by these programs and disregard them when they are immoral, illegal, or conflict with their experience. Officer input is vital in refining predictive models, eliminating spurious correlations, and providing a human check on suggested tactics.

In contrast, a study of Los Angeles Police Department (LAPD) in the United States and the Kent Police Department in the United Kingdom found statistically significant evidence of crime reduction using a predictive model. The authors compared the predictive capacity of an epidemic-type aftershock sequence model (ETAS) with traditional hotspot maps and found “that ETAS models predict 1.4–2.2 times as much crime compared to a dedicated crime analyst using

existing criminal intelligence and hotspot mapping practice”(Mohler et al. 2015, 1400). The LAPD and Kent PD use difference policing paradigms; LAPD uses a COMPSTAT (hotspot) model, which relies on the analysis of weekly crime trends and supplementary intelligence, while Kent PD subscribes to an intelligence-led paradigm whereby prolific offenders and high-risk issues are prioritized (Mohler et al. 2015, 1403). Thus, the authors conclude that both hotspot and intelligence-led policing can be made more effective by using predictive algorithms (Mohler et al. 2015, 1409). The study makes a compelling case for algorithmic predictive capacity but is less convincing of preventive capacity. Given the evidence of patrol presence decreasing criminal activity, it is fair to tout short-term crime reduction, but there is no evidence that this prevents crime in the long-term. It is possible that police presence merely disrupts criminal activity in the moment, diverting the crime to a new location and time.

There is also a concern that these programs breed criminals. While there is no empirical evidence that predictive policing programs create crime, Labeling Theory and crime trends provide the basis for this assertion. Labeling Theory suggests that crime begets further crime due to a transformation in societal relations with the deviant individual. This occurs by two mechanisms: loss of social opportunities and learned criminality (Vance 2013). It assumes that deviance is a socially constructed phenomenon and thus criminals are taught to internalize and perform this role through interactions with society (Vance 2013). Thus, negative police interactions with an individual may actually produce crime by labeling the subject a criminal, stigmatizing them and limiting their opportunities for social integration and advancement. Predictive policing programs, by creating lists of at-risk individuals, change the nature of interactions between police and at-risk subjects, marking them as criminals even if they have not yet committed a crime. This may, in turn, breed a self-fulfilling prophecy of criminality.

Labeling extends beyond the subject, often stigmatizing their family and friends, breeding pockets of criminality through social exclusion. Two of the strongest indicators for future criminality are juvenile delinquency and parental criminality (“Predictive Policing: A Review of the

Literature” 2012, 5). Even stronger effects are observed with parental incarceration (Murray, Janson, and Farrington 2007, 138). This may be partially attributable to the over-policing of family and friends of convicted or suspected criminals, resulting in higher *observed* crime rates among this population (Besemer, Farrington, and Bijleveld 2017, 2), as well the social stigmatization of those associated with criminals. Thus, predictive policing programs may create generations of criminals through a seemingly innocuous “at-risk” designation of a single individual.

1.6 Methodology

Two predictive programs will be analyzed through a carceral state framework: Palantir in New Orleans, Louisiana and the Strategic Subject List in Chicago, Illinois. The programs were selected to typify two reactions to public engagement—cessation and transparency. Palantir, a secretly adopted program, was terminated as soon as it was revealed, while the Strategic Subject List, a similarly secret effort, reacted by becoming one of the most transparent in the industry. The programs were designed to reduce gun violence in high crime metropolitan areas and take similar approaches to doing so—using Social Network Analysis (SNA) to compile risk profiles. Both areas have high rates of gun related violence and are large urban areas with legacies of racial inequity and discrimination. The analysis of these two cases will seek to answer: *How can predictive programs prevent crime in a more ethical, legal, and transparent manner?*

An influential case model was selected due to the poor availability of information on these programs. New Orleans and Chicago are notable examples of predictive programs with extensive press coverage that allows for a robust academic examination of their merits and failures. The influential case model is well-suited to small sample sizes, which is appropriate given the small sample of known predictive programs in the U.S. (John Gerring 2008, 657). Though it is hard to ascertain the typicality of these cases due to the lack of information on predictive programs, I feel comfortable in asserting that these are neither deviant nor extreme. They likely fall on the spectrum of typical cases in the field, but cannot be considered representative of all predictive programs—as each is unique. Scholar John Gerring, in his evaluation of case study techniques, states “the...usual employment of influential-case method culminates in a substantive reinterpretation of the case—perhaps even of the general model” (John Gerring 2008, 657). This, ultimately, is what this thesis seeks to accomplish—to question the notion of effectiveness by presenting a new measure of holistic effectiveness by which these programs must be evaluated.

Given the space constraints in this thesis, the decision was made to limit external variables as much as possible; thus, only predictive programs seeking to mitigate gun violence using SNA

were considered. This criteria excluded other urban programs, such as Los Angeles and Atlanta, which use Predpol, as well as Philadelphia and New York, which rely on Azavea's Hunchlab. Further, the analysis was limited to the United States (U.S.) by the use of the carceral state framework, which is specific to the country's legacy of slavery, racial subordination, and poor relations between the police and black communities. The U.S. was also selected due to its democratic nature, where transparency and public engagement is expected, and its localized police structure, which allows for in-country comparison (many European countries have nationalized police forces).

This qualitative case analysis is limited by a lack of research on the subject, which encouraged the influential case model selection. Policy transfer between these cities presents a further limitation. New Orleans learned from Chicago's efforts to combat gun violence, and vice-versa. This is an inevitable occurrence in the real world. There are also concerns around generalizability and representativeness, as it is impossible to know how representative these cases are given the lack of information about other programs. Accordingly, the generalizability is limited to cases that closely mirror the ones examined—complex, urban SNA predictive programs in high crime areas with substantial law enforcement resources. Ultimately, these cases were selected not for their fidelity to a model of case selection, but for the issues that they highlight—transparency, accountability, legality, racial bias, and community engagement. This can be considered a methodological limitation, but also an analytic strength.

Other forms of qualitative research such as surveys and interviews were not used due to the secretive nature of these programs and strict licensing contracts that preclude honest answers. Quantitative analysis was not used because of the challenges in quantifying ethics and morality as well as the lack of data available. Of the quantitative studies that exist, which are previewed in the literature review, the focus is always on predictive effectiveness with a very short-sighted definition of the term. This study eschews this traditional myopathy, instead presenting and evaluating

holistic effectiveness, which is comprised of ethicality, transparency, and legality in addition to immediate crime prevention.

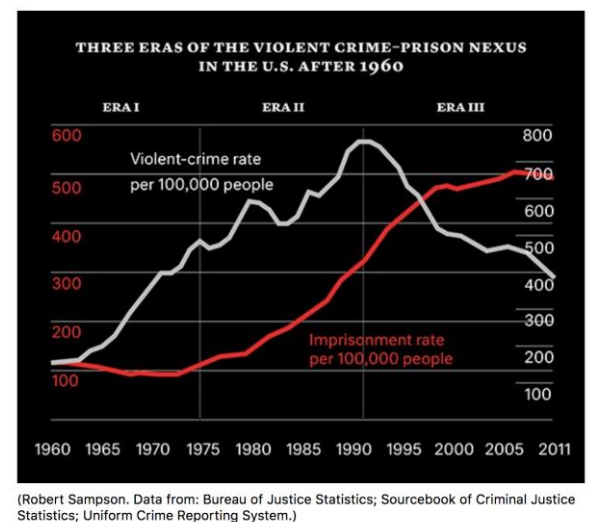
Chapter 2: the American Carceral State

The major gap in academics' discussions of predictive policing is its relationship with the carceral state. This thesis will seek to add to the literature by making this connection, arguing that predictive policing, like all law enforcement, is embedded within the larger framework of the carceral state and is thus subordinate to its primary goal of social control. While not all agree with this assertion, it has a strong basis in historical trends and current realities. Criminal justice systems have always served as mechanisms of control—of the poor, the deviant, and the lower castes. In modern America, this has taken on an expressly racial character. As of the last census, the black community comprises 13% of the American population, but 40% of the incarcerated population (Sakala 2014). This discussion, drawing from the work of Michelle Alexander, Ta-Nehisi Coates, Cornel West, and others, provides an overview of carceral state theory, especially as it pertains to social control of the black community in America.

Today, one in four black American males is in prison (Coates 2015), a phenomenon that is increasingly viewed not as a byproduct of increased criminality due to historic inequities, but as a concerted effort by the elite to maintain supremacy under the façade of racial equality (Michelle Alexander 2010). Fueled by a myth of black criminality and realized through the uneven application of laws and ordinances, the American carceral state has sustained a mass incarceration regime intent on disenfranchising, disempowering, and debilitating the black community.

After the historic Civil Rights Act of 1964, which ended *de jure* racial segregation in the United States, incarceration rates began to skyrocket. Rates doubled from 1975 to 1985 and again from 1985 to 1995, while the mentality behind prison sentencing shifted from one of rehabilitation to retribution (Coates 2015). These trends did not mirror the ebbs and flows of crime rates at the

Figure 2



time, as indicated in Figure 2. Meanwhile, sentences got longer as a result of mandatory minimums, sentencing reforms, and the “War on Drugs.” However, sentencing indeterminacy was only part of the picture; sentences also became more punitive, especially for drug-related crimes (Neal and Rick 2016, 2). The increased sentencing was not borne equally between racial communities; economists Derek Neal and Armin Rick found that, from 1985 to 2005, “the increases in incarceration-rate levels observed among blacks are more than three times those observed among whites” (Neal and Rick 2016, 31). In modern America, a two-tiered legal system exists, whereby black crimes are upgraded to those with mandatory minimums while white crimes are left to judicial discretion,⁵ a system where “blacks receive sentences that are almost 10 percent longer than those of comparable whites arrested for the same crimes” (Rehavi and Starr 2014, 1320). As of the 2010 census, it is thus five times more likely for a black American to be imprisoned than a white American (Sakala 2014).

The United States uses prison as an answer to social ills, preferring lean social services and bloated incarceration budgets to sustainable efforts to address poverty, substance dependence, illiteracy, and homelessness. As President Richard Nixon said in 1968: “Doubling the conviction rate in this country would do far more to cure crime in America than quadrupling the funds for [the] War on Poverty” (Coates 2015). Rather than addressing the structural factors that underlie criminality, President Nixon advocated for harsher sentencing and mass incarceration—especially for “those damn Negro-Puerto Rican groups out there,” who he blamed for the deterioration of law and order in America (Michelle Alexander 2010, 46–48). By physically removing unwanted actors from society, the carceral state maintains the demographic profile of its ideal society in a democratic manner. Coupled with the “War on Drugs,” which reinforced the myth of black criminality while creating Jim Crow laws⁶ for a new “colorblind”⁷ age, the carceral state was

⁵ Rehavi and Starr found that black subjects were 1.75 times more likely to receive a charge that has a mandatory minimum than their white counterparts (Rehavi and Starr 2014, 1323).

⁶ Jim Crow refers to segregationist laws in effect after the dissolution of slavery in the Southern United States.

⁷ “Colorblind” refers to the concept that the United States is a post-racial society after the end of slavery and Jim Crow laws.

cemented into place (Michelle Alexander 2010). Meanwhile, this system of penal welfarism, or using prisons to address social ills, spawned an industry of its own. It created a new class of employment for white, rural populations in the form of correctional officers (Coates 2015) while simultaneously cultivating a virtually free source of labor from the prison population. Like the Victorian Workhouse, prisons offer an easy “fix” to complex social problems without altering the status quo. But like in the United Kingdom, their application is tantamount to enslavement of an undesired societal faction under the pretense of social welfare. In the current restrictive environment, where convicts can be barred from certain employment, suffrage, social programs, and housing, recidivism is high and a lifetime of incarceration becomes a near inevitability (Coates 2015; Michelle Alexander 2010, 94–95). As a result, the American prison system has reimagined slavery in the modern age.

The carceral state’s subjugation of the black community is most pronounced due to the sheer number of black Americans in prison, but this phenomenon also applies to immigrants, the Latino community, Native Americans, the poor, and other socially marginalized communities. Immigration and Custom Enforcement’s use of indefinite detention, family separation, and administrative courts—where defendants are not entitled to legal representation—fosters a culture of fear that stifles participation, integration, and prosperity for all immigrants in the United States. Likewise, Latino and Native American populations are more likely to be imprisoned than their white counterparts. “Native Americans are incarcerated at a rate 38% higher than the national average” (Flanagin and Flanagin 2015), while Hispanic Americans have an incarceration rate double that of white Americans (Sakala 2014).

The carceral state framework views the criminal justice system, specifically the mass incarceration it authorizes, as a mechanism of social control. However, to limit analysis to mass incarceration would be to ignore the more subtle manifestations of the carceral state that account for the vast discrepancies in the everyday experiences of white and black members of society. In the aftermath of the Civil Rights Movement, racially unequal laws were no longer politically

tolerable—but the unequal application of them was. The intentionally uneven enforcement of ordinances serves as a method of both revenue generation and social control under the guise of racial equality—a solution tailored for racism in a colorblind age (Kahrl 2018). In many municipalities, law enforcement officers are forced to act like tax collectors—turning to tickets, fines, and fees to fill city coffers (Jones 2017, 39–42). And much like *Robin Hood's* Sheriff of Nottingham, they look for opportunities for their two jobs to intersect by levying the greatest number of fines on individuals seen as threats to law and order. Judge Ed Spillane said, of this phenomenon, “As a municipal judge in College Station, Tex., I see 10 to 12 defendants each day who were arrested on fine-only charges: things like public intoxication, shoplifting, disorderly conduct and traffic offenses” (Spillane 2016). This practice perpetuates cycles of poverty and social immobility, leading to the reincarnation of debtors’ prisons where indigent defendants cannot pay their fines or fees. It is tempting, in the age of colorblindness, to view this as an issue of class, not race, but the evidence of racial disparities in the levying of fines and fees is convincing (Jones 2017). These policies do not decrease crime; they merely serve to generate revenue and perpetuate the subjugation of those who not fit into the *imagined community*⁸ of the white elite.

⁸ Refer to Benedict Anderson’s *Imagined Communities: Reflections on the Origin and Spread of Nationalism* for further information on this concept.

Chapter 3: New Orleans Case Study

From 2012 to February 2018, the New Orleans Police Department (NOPD) covertly employed predictive policing software created by Palantir Technologies in an effort to combat gun violence. Palantir leased the software on a pro bono basis to Mayor Mitch Landrieu's "NOLA For Life" murder reduction program, bypassing city council approval and oversight (Winston 2018). After journalist Ali Winston's investigative reporting about the city's use of Palantir in *the Verge*, and subsequent public outrage about the invasiveness and secrecy of the program, New Orleans decided to terminate its relationship with Palantir (Jonathan Bullington and Emily Lane 2018). NOPD's use of Palantir is a cautionary tale about what governments may do when their power goes unchecked. It magnifies classic concerns about transparency, accountability, oversight, and data privacy, but also poses new questions about the role of private corporations in handling public data, the use of wartime technology for domestic purposes, and the ethics of a municipal surveillance state.

Backed by Central Intelligence Agency (CIA) funding through In-Q-Tel, a CIA-funded venture capital firm, Palantir's early work was in wartime risk-assessment and counterterrorism (Peretti 2017). One of its original predictive programs forecasted the placement of improvised explosive devices in Iraq and Afghanistan (Winston 2018). This began a long-standing relationship with the Pentagon, which employs Palantir for a wide array of work, from instant DNA analysis to predicting and tracking terrorists—including Osama bin Laden—all over the world (Peretti 2017; Waldman et al. 2018). It was seen as a solution to the pre-September 11th silo-ization of intelligence; a platform that could comb through reams of federal, state, and local data to detect threats faster than any human analyst (Ashley Vance and Brad Stone 2011). Realizing that its predictive work in combat theaters was uniquely suited to track criminals on the home front, Palantir developed a platform called Palantir Law Enforcement. The platform centralizes police data into one database, perfectly suited for use by analysts, street cops, and transit police alike.

Needing a police department to pilot its new technology, Palantir entered into a thrice-renewed pro bono agreement with the City of New Orleans in 2012 (Winston 2018).

The domestic use of Palantir, which was designed for wartime risk analysis, elicits significant ethical and legal concerns by violating a hallmark of strong democracies—the strict separation of army and police. While the image of police militarization is one of tanks, snipers, and tactical gear, social network analysis allows police a window into the most intimate details of an individual’s life. Palantir fuels the militarization of the police in a quieter, yet arguably more powerful, manner. As one cyber expert who worked with Palantir on the insider threat team at JP Morgan said, “The world changed when it became clear everyone could be targeted using Palantir”; further, Palantir’s facial recognition technology has reached dystopian proportions: at least 50% of American adults can be identified through a single picture (Waldman et al. 2018). Built upon a platform that predicts and hunts terrorists, Palantir allows urban civilians to be treated like foreign combatants, facilitating the conceptualization of cities as theaters of war. But this shift has not addressed the underlying causes of war conditions—the proliferation of guns, vast racial and socioeconomic inequities, unaffordable housing, the carceral state—or provided citizens with the care and compassion that soldiers are afforded when they return from war. Instead, it has created a mass surveillance apparatus capable of monitoring and tracking the city’s most vulnerable.

3.1 The Palantir Model

3.1.1 Social Network Analysis

Palantir works by utilizing social network analysis (SNA) for law enforcement prediction. SNA looks for patterns of human organization and interaction to ascertain pathways of criminal behavior (Jennifer A. Johnson et al. 2013). As partially demonstrated by figure 3, Palantir maps phone calls, bank transactions, gang affiliation, addresses, car registration, phone numbers, common citation in police reports, social media friendships, and other relationship indicators to provide analysts with a visual representation of human networks (Palantir 2013).

Figure 3
Social Network Analysis in Palantir

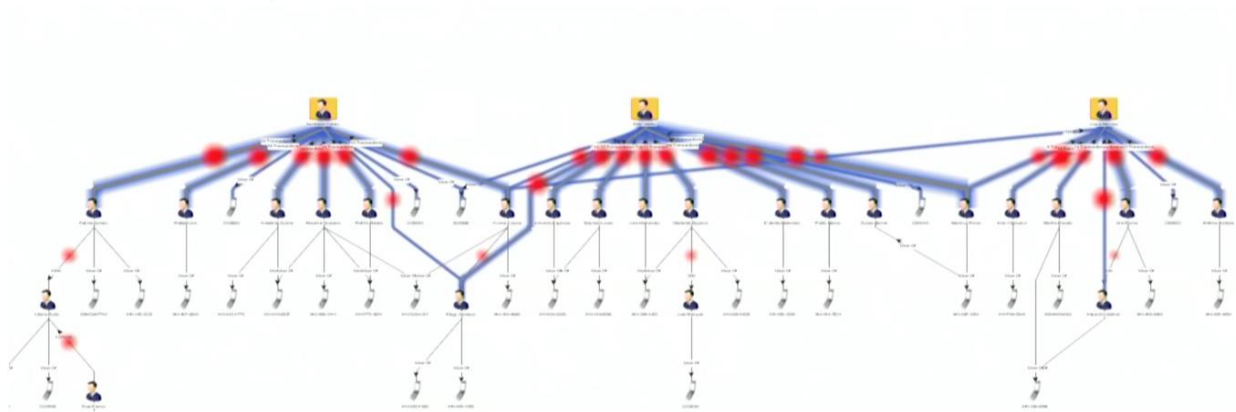


Figure 3: A social network analysis performed during a demonstration of Palantir for human trafficking investigations. The red dots indicate size and flow of financial transactions. Source: Palantir, *Building a Human Trafficking Case from a Lead to Arrests*

By distilling masses of data into an understandable format, Palantir can elevate human analytic potential. However, due to its basis in SNA, it runs the risk of identifying spurious relationships, as illustrated in the case of alleged gang leader Kentrell 'Black' Hickerson. Mr. Hickerson was convicted in 2016 on charges related to his leadership of the 3NG gang and received a sentence of 100 years in prison (Jonathan Bullington and Emily Lane 2018). He is currently appealing his sentence on evidence suppression grounds, claiming the prosecution did not submit evidence gathered from Palantir during discovery. The existence of the 3NG gang was heavily disputed during the case, with a witness stating that it was not a gang, but “a group of people that grew up around each other” (Jonathan Bullington and Emily Lane 2018). If the prosecution’s case in favor of 3NG’s gang classification was built from Palantir’s social network analysis—as the defense believes it was—then they were compelled to produce that evidence in discovery. On April 3, 2018, a New Orleans judge granted the first motions in the appeal, allowing Mr. Hickerson’s attorney to subpoena Mayor Landrieu and his staff regarding the use of Palantir in producing exculpatory evidence used by the prosecution (Matt Sledge 2018). This may result in the first legal challenge to Palantir, and one of the earliest rulings on predictive policing in

general—a crucial step in providing oversight and accountability for this largely unmonitored space.

SNA is designed to detect patterns between people, running the risk of creating them where they may not exist. Mr. Hickerson was acquitted of all individual-level charges; thus, his conviction is contingent upon his leadership in the 3NG gang. If Palantir’s SNA manufactured a nonexistent gang, then it is responsible for depriving a black man of his freedom and embedding him in the carceral state for the rest of his life.

3.1.2 Linking Social Network Analysis to Gun Violence

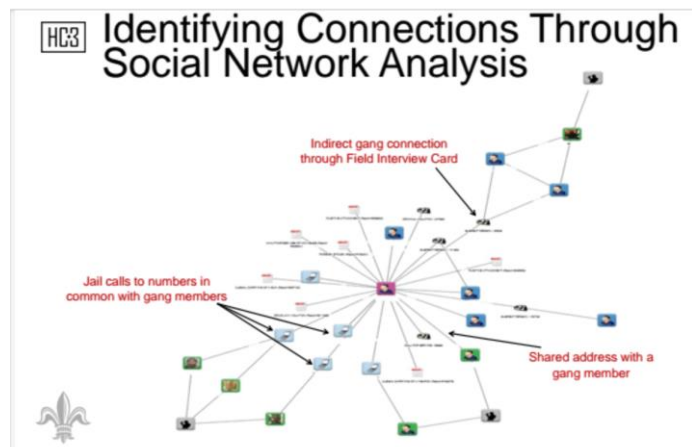
Researcher Andrew Papachristos and his team demonstrated the predictive applicability of SNA to gun violence. Their research on arrests of co-offenders in Chicago from 2006 to 2014 demonstrated that gun violence spread like an epidemic through “social contagion” (Green B, Horel T, and Papachristos A 2017, 327).⁹ They found that gun violence behaves like an infection; accordingly, the best way to predict the likelihood of being shot (infected) is to look for connections to previous victims and/or perpetrators of gun violence (infectors) (Green B, Horel T, and Papachristos AV 2017, 331). The authors advocated for a public health approach to the problem, integrating housing, education, health, and social services to prevent gun victimization and build resilience (immunity), rather than the traditional law enforcement approach (Green B, Horel T, and Papachristos AV 2017, 331–32).

⁹ Notably, their earlier research was also used as the basis for the Strategic Subject List in Chicago, which will be examined in the following chapter.

3.1.3 Adapting Palantir to New Orleans

SNA is not inherently predictive; it is generally used as an investigative tool. However, in an effort to combat gun violence in New Orleans, Palantir paired it with a preexisting gang database and historic crime trends to create a predictive model that forecasts gun violence in the city (Winston 2018). No

Figure 4



Source: Jeff Ascher, *Combating Crime in NOLA with Palantir*

data is available on the specific indicators used to create these forecasts, and because the contract was terminated, it is likely that they will never be known. However, a slide deck from Palantir's 2014 Hobbitcon (annual conference) indicates that five neighborhoods were targeted for their past share of gun violence and the profile of a likely victim/perpetrator of gun violence was: "young, African American, male, undereducated, and underemployed" (Sarah Schirmer 2014). The presentation also states that "jail calls and phone data, gang affiliations and violence activity, crime lab data, ballistics analysis, and social media" were used as data sources (Jeff Asher 2014).

Figure 5, also from the presentation, indicates a sample SNA used to predict and prevent gun deaths. This type of social network analysis was performed on all victims and perpetrators of gun crimes between 2011 and 2013 to create a network of 3,941 high-risk individuals (1% of the total city population) (Jeff Asher 2014). From here, Palantir developers further refined the model by examining only members of the high-risk population aged 19-31 with a recent criminal history, eliciting a pool of 2,094 individuals most at risk of committing or being a victim of gun violence (Jeff Asher 2014). This may have been refined by other indicators; it is unclear whether socioeconomic or racial indicators were overtly used. However, the restriction of suspects to five key neighborhoods makes certain that socioeconomic status and race likely were used by geographic proxy. Once suspects were identified, a mix of social services and law enforcement

tactics were employed through NOLA for Life and NOPD. As a result, the presentation claims that Palantir reduced gun deaths by 20% and non-fatal shootings by 14% (Jeff Asher 2014).

If this success is to be attributed to Palantir, which is in no way definitive, one of the reasons underlying the achievement may be its integration with the NOLA for Life program. NOLA for Life delivers valuable social services such as counseling, mentoring, and employment instead of using traditional police responses; it also works with local schools to provide support and programming based on the principles of restorative justice and trauma-sensitivity (City of New Orleans 2016, 6–7). The inclusion of social services is a rare and encouraging development in predictive policing, however the referral process can be employed as a tool of surveillance and control, as discussed below. Further, NOLA for Life only addresses the symptoms of inequality, not their causes. Thus, it will likely prove insufficient as a sustainable crime reduction strategy, for it does not engage with the broader system that produces these inequalities—lack of affordable housing, unequal education, employment discrimination, etc.—or the carceral state mechanism that ensures their legacy.

3.2 The Shire or the Surveillance City?

Named after the omnipotent crystal balls in *Lord of the Rings*, Palantir is a manifestation of the company’s desire to “protect the Shire,” an unofficial motto of the company (Ashley Vance and Brad Stone 2011). But as pure as their intentions may be, the sophistication of this technology has the power to realize a *Minority Report* future, where government and corporate interests claim to hold predictive power over one’s actions, interests, and future. Unchecked, this power could have devastating consequences for civil liberties and greatly diminish quality of life.

Meaningful public engagement would have assisted in the creation of proper accountability mechanisms for data usage and police behavior. Through the NOLA contract, Palantir, a private corporation, had access to data previously only available to those in public service, both through their use of NOPD’s Lexis Accurint license and through the multitude of NOPD databases that

fed into Palantir (which included crime data, personal identification information, license plate registration and readings, CCTV footage, social media data, gang affiliation, parole and crime reports, case worker files, phone records, and so on) (Winston 2018). Since neither the public nor city data protection employees were aware of the contract, there was no known monitoring of Palantir's access to and use of NOLA's law enforcement data (Winston 2018). Given the lack of legal protections on third party data handling via *United States v. Miller (1976)*, this is of particular concern. The public rightfully assumes that data made available to law enforcement will be kept secure and used for the public benefit—not corporate profit.

While it is possible that transparency would have prevented the implementation of this software, it could have equally resulted in a more sustainable, rights-conscious solution. No one understands the toll of gun violence better than the five communities targeted by this program; they were entitled to consultation about the implementation of Palantir. They may have assented to a pilot of the program, but would have been empowered with the ability to ensure it was conducted ethically and effectively. However, their exclusion was likely not an accident, as it would have precluded the current level of surveillance and social control.

Palantir, like all technology, is not inherently evil. It has vast potential to improve the human experience, and many of its engineers truly believe they are doing so (Ashley Vance and Brad Stone 2011). Yet the question remains—whose experience is it improving? While this software could be used to predict police brutality or white collar crime, New Orleans chose to focus exclusively on the “street crime” of gun violence, a choice that unquestionably has a racial and socioeconomic dimension. It deemed “young, African American, male, undereducated, and underemployed” as those most “at risk” of perpetrating this crime (Sarah Schirmer 2014), providing the rationale for enhanced surveillance and control. Through the program, NOPD was able to centralize its data on this particular demographic—one that has historically poor relations with the police—building a repository of information that likely remains, despite the termination of the Palantir contract. This surveillance and data repository is concerning because it risks

infringing upon the subjects' civil liberties. Due to the nature of SNA, the most "at-risk" subjects in the database may never have committed a crime. Instead, many are friends, family, or neighbors of victims/perpetrators of previous gun violence. This may increase their risk, but it does not warrant the dissolution of their Fourth Amendment rights. Through the lottery of birth, these individuals grew up in high areas of violence—that does not mean their civil liberties should be any less protected than those in affluent, low crime neighborhoods.

3.2.1 NOLA for Life Referrals and the Carceral State

The NOPD complemented this surveillance with physical demonstrations of power, approaching "at risk" subjects to refer them to NOLA for Life (Winston 2018). During these referrals, police officers, social workers, and/or former prisoners, warned subjects of their risk and the potential for arrest if they perpetrated gun violence, and offered NOLA for Life's services (Winston 2018; City of New Orleans 2016). If this were purely a public health effort—one that leveraged social services to prevent crime—it would not raise ethical or legal concerns. However, these referrals bore the threat of arrest; 50 of the 308 subjects that sought NOLA for Life's services after a referral were arrested (Winston 2018). Thus, these referrals are as much mechanisms of control as genuine attempts to link subjects with social services. They demonstrate the city's power over at-risk subjects and inform they are now at the mercy of the police. This reality is unheard of in white America—it is the stuff of dystopian fiction. Yet, for young urban black men, the carceral state breeds perpetual fear and inequality, subordinating them to a lower caste in a society that believes it is colorblind (Michelle Alexander 2010, 12–13).

3.3 Conclusion

Palantir is a private company seeking profit from taxpayer dollars and control via data previously reserved for law enforcement. This elicits significant concerns about data privacy, public oversight, accountability, transparency, and, more largely, the role of private corporations

in public law enforcement. Further, Palantir was unilaterally contracted by the Mayor's office, bypassing the City Council, civil society, and the communities most impacted by these decisions (Winston 2018). This was done as a matter of efficiency and control, but it also was the program's undoing. The decision to integrate NOLA for Life was a positive aspect of the program, as social services are a more just means of addressing crime, but NOLA for Life's symptomatic approach and referral process—whereby police officers control subjects through the threat of arrest—perpetuated the carceral state rather than mitigating it. Thus, this program is ineffective when analyzed from a holistic perspective.

Chapter 4: Chicago Case Study

When faced with calls for transparency, New Orleans Police Department (NOPD) chose to terminate its program in an effort to protect its secrets. In contrast, when the Chicago Police Department (CPD) was confronted with public pressure to disclose elements of its predictive program, it begrudgingly complied, saving the program. This supports the assumption that public engagement and transparency make for a more effective program—at least in terms of longevity.

4.1 The Strategic Subject List Model

The CPD uses two forms of predictive technology in their program: Social Network Analysis (SNA) with the SSL and Place-Based Prediction via the use of Hunchlab. These are complemented by Shotspotter, a 30,000-strong fleet of high resolution cameras around the city that track gun violence (Williams 2018). The SSL scores individuals on a scale of 0 to 500 for their propensity to be a victim or perpetrator of gun violence (City of Chicago 2017). Developed by researchers at the Illinois Institute of Technology and funded through a Department of Justice grant, the SSL uses indicators such as: “number of times being the victim of a shooting incident, age during the latest arrest, number of times being the victim of aggravated battery or assault, number of prior arrests for violent offenses, gang affiliation, number of prior narcotic arrests, trend in recent criminal activity and number of prior unlawful use of weapon arrests”¹⁰ to determine risk (City of Chicago 2017). The city emphasizes that race and sex are not used in the risk calculations—a likely product of the transparency of the program (City of Chicago 2017).

A 2016 study of the 2013 SSL pilot program found that individuals on the SSL were no more likely to be victimized by gun violence than the control group when demographics, crime history, and social networks were controlled for (Saunders, Hunt, and Hollywood 2016, 362). Validating critiques that these programs predict police response rather than crime, the study found

¹⁰ These were the eight indicators used in the 2012-2016 model of the SSL. Since then, CPD has acknowledged it has ceased to use gang affiliation as an attribute (Mick Dumke and Frank Main 2017).

that those “on the SSL were 2.88 times more likely to be *arrested* for a shooting,” [emphasis added] possibly because police use the list to cultivate leads in shooting cases (Saunders, Hunt, and Hollywood 2016, 362). Despite these findings, CPD is proceeding with the program, which now has nearly 400,000 subjects (City of Chicago 2017). Of those, Police Superintendent Eddie Johnson claims that 1,400 are driving the majority of gun violence—a figure used repeatedly by politicians and police (Davey 2016). This is an interesting claim because the 1,400 highest risk people have scores of 427 or above; in a model that has the sole purpose of risk assessment, 427 seems like an oddly arbitrary threshold for designating high risk. In contrast, spokesman Anthony Guglielmi stated that: “Individuals only really come on our radar with scores of 250 and above” (Mick Dumke and Frank Main 2017). This would suggest that CPD is surveilling at least 287,404 people. These vastly different claims, coupled with the evidence of lack of predictive and preventative power, cast doubts on the effectiveness, nature, and transparency of the SSL.

4.2 Transparency in the Surveillance City

The city has been begrudgingly transparent about its use of the SSL due to civil society and journalist activism. It was compelled to provide the SSL data to the Chicago Sun-Times via a freedom of information request and subsequent legal battle in 2017 (Mick Dumke and Frank Main 2017). Today, the de-identified dataset is available online—making it one of the most transparent programs in the U.S. However, the data online reflects a previous version of the list employed from August 1, 2012 to July 31, 2016, leaving activists to wonder about updates that have been made since. Public engagement undoubtedly made this system more transparent and accountable; the tireless efforts of journalists and civil society have elicited some major victories—publication of the SSL dataset, disuse of race and sex as attributes in the SSL, and removal of gang affiliation from the most recent algorithm (Mick Dumke and Frank Main 2017). Yet, as seen in the publication of the SSL dataset, variables such as race, sex, gang affiliation—even location—still

remain in the database; their “removal” merely indicates that they are no longer used as attributes to determine risk.

While CPD’s transparency is preferable to NOPD’s secrecy, it is can also be used to manipulate and distract the public. In Chicago, disclosures are often made after programs have been implemented (Mick Dumke and Frank Main 2017). As one activist noted:

There was not a conversation like, ‘Do you want this in your community?’ Instead, the Chicago police say, ‘This is in your community and it is going to cut crime,’ and unfortunately, people don’t question that. It’s now been normalized for these communities to be under constant surveillance, which contributes to the criminalization of people. It is problematic. (Williams 2018)

Transparency, when used after the fact, serves as a tool to dismiss the well-founded concerns of over-surveilled communities.

4.2.1 Custom Notifications and the Carceral State

CPD officers and social workers make visits to subjects on the SSL through a process called custom notifications, advising them of their status and warning them of the consequences of future crimes (Davey 2016; Posadas 2017). The visits, like in New Orleans, are a statement of power and authority over a community of young, black, marginalized men—a reminder of their subordination to the surveillance city.

Because the algorithm is based on arrest data rather than convictions, and uses a social network model, it is possible that subjects receiving a notification have not committed any violence. The American legal system does not prosecute based on future crime; accordingly, this visit, if construed as a threat of arrest, may be a violation of the individual’s civil liberties. Further, if Labeling Theory is correct, custom notifications may produce criminality by eliciting a self-fulfilling prophecy of behavior. Thus, the causality underlying the model would be incorrect; it is the high-risk designation that creates a propensity toward gun violence, not a propensity towards gun violence that precipitates a high-risk designation.

4.3 Racial Bias in the Strategic Subject List

Figure 5

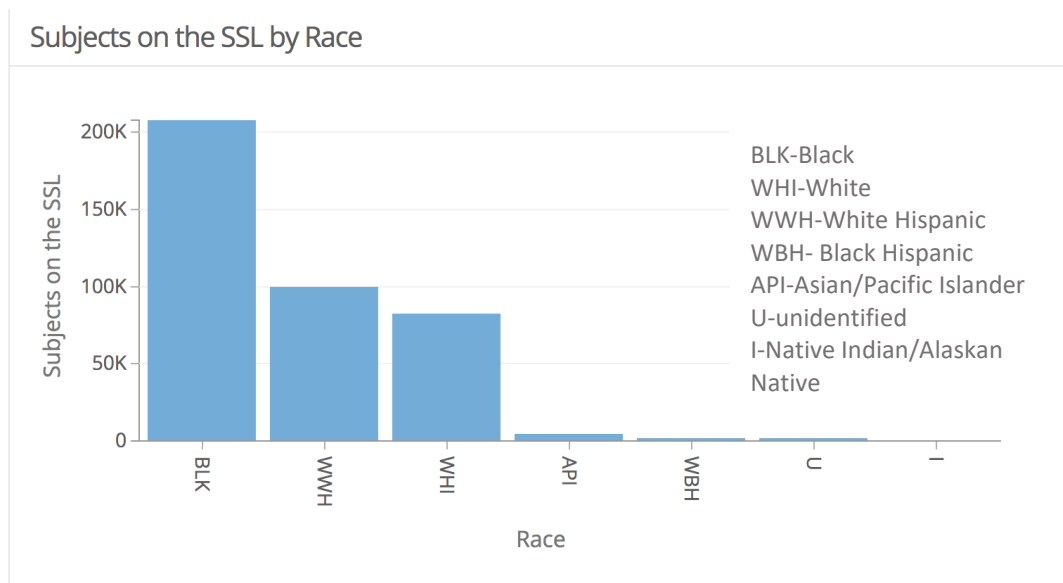
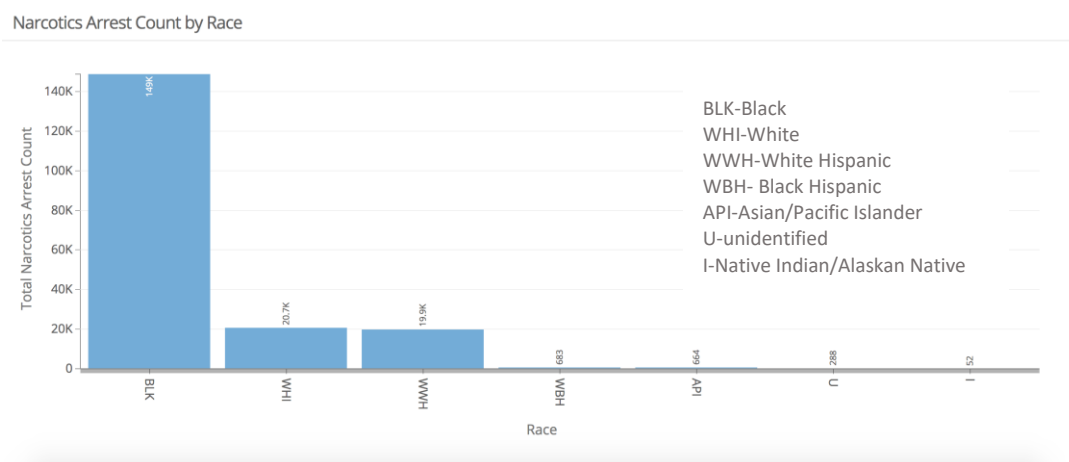


Figure 6



Data source for figures 5 and 6: City of Chicago, Strategic Subject List, 2017

The largest concern about the SSL is its potential racial bias. Currently, 32.3% of the Chicago population is black (“Race and Ethnicity in Chicago, Illinois” 2015), yet, as indicated in figure 5, 50% of those on the SSL are black. Further, 85% of those with scores of 500+, the highest possible score, are black men—and most are young (Mick Dumke and Frank Main 2017). This may be attributable to the racial dimension of narcotics arrest—one of the variables used in the

SSL algorithm to determine risk. As indicated in figure 6, narcotics arrest rates are strongly correlated to race, and may be used as a proxy variable for race in the algorithm—allowing CPD to remain officially colorblind while still factoring race in the determination. It is rumored that narcotics arrest rates may be removed from the most recent algorithm due to low predictive power (Asher and Arthur 2017), which poses an interesting question—if narcotics arrest, a racial proxy, does not predict gun violence, than why are over half of the subjects in the database black? When considering the (1) ineffectiveness of risk scores in predicting gun violence and (2) lack of a commonsense cut off mark in determining “high risk,” it is possible that the intended uses of the full predictive program extend beyond risk scores.

Race, sex, and geographic information, while allegedly not used in the algorithm, are being tracked alongside the risk variables, and were even released in the public dataset. Given the composition of the database, which is over half black, this results a large repository of information on a community that has a history of poor relations with the police. This is concerning from a civil liberties and ethics perspective due to the ease in which it could be misused, and because there is little transparency about how it is compiled, who is on it, or how one could appeal their status. The CPD’s release of the dataset may lead some to believe that these concerns are no longer valid; however, it is the information that is being obscured—the composition of the algorithm, procedures for data protection, and information about the full scope of this program—wherein the greatest threats to civil liberties lie.

4.4 Conclusion

While the unwavering diligence of Chicago’s civil society and journalists elicited certain levels of transparency, it may also have fostered a false image of ethicality. Rather than providing details on the current predictive algorithm(s), CPD released the entire 2012-2016 Strategic Subject List (SSL) dataset online, allowing it to claim complete transparency without answering any questions about racial profiling, effectiveness, or accountability mechanisms. Meanwhile, CPD

controlled public debate by informing impacted communities of the predictive efforts without giving them any meaningful say in their development or use (Williams 2018). Public engagement is often regarded as a solution to the challenges of accountability, oversight, profiling, transparency and data privacy. Yet, Chicago's selective transparency with the SSL demonstrates some of the barriers to effective public engagement, and supports the need for a new, sustained, and informed public movement to emerge. Further, the disproportionate representation of the black community on the SSL and use of narcotics arrest—a proxy variable for race—in determining risk, suggests that the SSL is operating in a racist manner. This evidence is compounded by the custom notifications process, which facilitates a system of social control and perpetuates existing racial inequities.

Chapter 5: Further Analysis

This chapter provides an assessment of the most important finding in the New Orleans and Chicago case studies: the advent of surveillance cities.

5.1 The Advent of Surveillance Cities

There is a certain expectation of federal surveillance activities in modern America. Police departments, by contrast, are not generally conceived of as intelligence agencies with advanced surveillance capacities. However, predictive policing technology has upended this order, creating micro intelligence agencies across the United States.

5.2.1 Threats to Civil Liberties

As detailed in the case studies above, the surveillance city poses a significant threat to civil liberties. Due to a lack of transparency, these programs provide little information about the composition of their datasets, the algorithms used, or how one may challenge their risk determination. Further, social network analysis (SNA)-based predictive programs use one's connections as criteria for their risk designation, allowing individuals who have not committed a crime to be added to the database. These individuals, once marked high-risk, are subsequently the targets of increased monitoring and preventive police visits, labeling them criminals to the community and potentially creating a self-fulfilling prophecy of criminality. This contradicts the American legal principal of presumed innocence and may constitute a breach of the Fourth Amendment right against unwarranted search and seizure. Intimate details of one's private life are no longer found only on the papers in their home; they are now found in their internet activity. While the courts have not yet ruled on whether predictive policing programs violate Fourth Amendment rights, it is imperative that new legal standards be established to protect civilian privacy in this largely unregulated space.

5.2.2 *Racial Bias*

The racist application of these programs, whether unintentional or as a byproduct of the carceral state, is the gravest concern regarding the development of the surveillance city. Given the United States' history of slavery and racial apartheid, it is important to examine whether these programs unduly focus on black communities and what measures can be taken to rectify any present biases before they exacerbate inequalities. The case study analysis found evidence that both the New Orleans and Chicago Police Departments' (CPD) programs disproportionately impacted young black males. While it cannot be said for certain whether these programs increase the arrest rates of young black males—a question for further empirical analysis—they appear to increase surveillance and data collection on this demographic. This perpetuates a system of control over an already disenfranchised population, further marginalizing them rather than building trust. Further, large repositories of information on urban black communities are rightly met with skepticism due to the legacy of race relations in America—which suggests that this information will be used to continue a system of subordination rather than protecting the community it purports to serve. These concerns may not come to fruition, but the communities most affected have a right to know how their data is being stored and petition for it to be deleted if these programs prove ineffective.

Predictive programs mirror the biases of their developers, data collectors, and users. Thus, the implicit racism that permeates American life will be reflected in this technology—whether it is recognized or not. This is a difficult reality to confront and will require a significant movement to upend. Thus, predictive policing needs to be challenged by a broad-based civil rights movement for a new age, one that understands the manifestations of technologically facilitated racism and will fight for just treatment in the era of big data. This platform is an important addition to the work done to combat the drivers of crime—unaffordable housing, employment discrimination, unequal education, poverty, and, increasingly, mass incarceration and the carceral state (Michelle Alexander 2010, 10–11). While civil rights organizations care about predictive policing, it is not at

the top of their platforms;¹¹ this is understandable, given the scale of inequities in America. However, predictive policing provides an opportunity to form a coalition of individuals and organizations concerned with data privacy, surveillance, government overreach, poverty, and racial justice, just as the ACLU and its partners did with their “Shared Statement of Concern.” (ACLU et al. 2016). This diversity of actors could instigate meaningful systemic reform, potentially reforming the racist undertones of the carceral state.

5.1.3 *The Democratic Deficit*

Predictive policing technology often excludes the public from decision-making, insisting that these are security issues that will be compromised by disclosure. This creates a democratic deficit, whereby citizens, whose tax dollars fund these programs, are not allowed to oversee the application of predictive algorithms or contribute to their creation. People may not have the technical knowledge to grasp the exact mechanism by which a product operates, but they can certainly understand the ethical implications of its use. Informed, persistent, and responsive public engagement is crucial for the creation of moral and legal predictive programs. Yet, these cases illustrate that engagement, in itself, is not enough—it must be accompanied by law enforcement willingness to amend the program based on community values. By informing the public of the existence of predictive programs after they were already in place, the CPD obstructed meaningful public engagement and disempowered the communities most affected by gun violence. Public engagement is undoubtedly a difficult task from both an informational and operational standpoint because it challenges a system used for social control, but it is the most efficient way to make these programs more ethical, legal, and transparent.

The current democratic deficit in predictive programs is a threat to their sustainability, morality, and legality; thus, it is in the best interest of both law enforcement and the communities

¹¹ For instance, a search on the National Association for Advancement of Colored People (NAACP) website does not elicit any results for “predictive policing” and it is not mentioned under their criminal justice section. However, Black Lives Matter, the ACLU, and the National Association of Criminal Defense Lawyers have acknowledged it as a problem, though they do not devote much space to it on their websites.

in which they operate to create a system whereby citizens are empowered to protect their values. This would improve community relations and may even decrease crime through the establishment of a more equal relationship between law enforcement officers and their communities. Advancement could be boundless, but without a moral compass, it will likely be self-destructive. It is up to communities, government, civil society, and other actors to protect data privacy, implement accountability mechanisms, defend legal rights, demand transparency, and—when they have gone too far—terminate programs that endanger the public welfare. This engagement must include marginalized communities—specifically urban, black young disadvantaged men, to whom predictive programs often assign highest risk.

Conclusion

In a prescient dissent to America's first wiretapping case, Justice Brandeis wrote "Ways may someday be developed by which the Government, without removing papers from secret drawers, can reproduce them in court, and by which it will be enabled to expose to a jury the most intimate occurrences of the home" (Justice Louis Brandeis, dissenting 1928, 277). Today, law enforcement agencies have the ability to surveil and exploit the most intimate information without leaving their computers, generating innumerable ethical and legal quandaries. Yet, Justice Brandeis' warning is a poignant reminder that, while the methods may be new, the tradeoff between security and privacy is not. The Fourth Amendment right against unwarranted search and seizure may be an American cornerstone, but it will always be balanced with the Government's interests of safety and control. History provides important context for the advent of the surveillance city, but it also comes with a warning. Without sustained, informed, and meaningful public engagement in predictive policing programs, they will continue to grow in their current image: unaccountable, unethical, and possibly illegal. Citizens must demand oversight, transparency, and morality from their police departments, which spend taxpayer dollars on predictive policing technology. However, public engagement, as it is currently exists, is not enough. As demonstrated by the case of Chicago and the Strategic Subjects List, the public can easily be manipulated into a false sense of security, allowing a surveillance city to operate with the tacit approval of the people. Thus, public engagement must be channeled through a new civil rights movement—one that challenges the technologically facilitated racism presented by these programs and seeks to overhaul the carceral state.

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