# Policing the Future: the new criminal anthropology

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The computer then cranks and heaves and gives an answer, and there is some temptation to obey the computer. After all, if you follow the computer you are a little *less responsible* than if you made up your own mind.

- Gregory Bateson, Steps to an Ecology of Mind (1972)

## A Body of Evidence

Just before noon on August 09, 2014 Officer Darren Wilson responded to a call about a robbery in the Market and Liquor convenience store in Ferguson, Missouri. Wilson scoured the rundown streets in search of two 'black males' and quickly encountered Michael Brown and Dorian Johnson on Canfield Drive. Minutes later, Michael Brown lay dead in the street. His bloodied body remained in plain sight for several hours. Residents and relatives gathered at the scene and several recorded what they saw on their smart phones. Videos spread quickly and virally through social media, especially one in which a narrator declares, 'The police killed him, yeah. Say he had his hand up and everything; they still shot him' (CNN 2014). The spot where Brown died became the focus of a spontaneous and peaceful gathering. However, Ferguson police assembled in force, and violence soon erupted.

Four days after Brown's shooting, protesters in Clayton, Missouri were confronted by a SWAT team armed with tear gas, rubber bullets, flash grenades and smoke bombs. Protesters started out decrying the militarisation of policing and ended up watching as weaponized law enforcement failed before their eyes. Missouri Governor Jay Nixon declared a state of emergency, implemented nightly curfews and eventually called out the National Guard. In November, following the decision of grand jury not to indict Officer Wilson, a state of emergency was again declared in Ferguson. This time, local protests were accompanied by several international demonstrations.

The events in Ferguson in 2014 and 2015 are the subject of many thousands of international newspaper articles, many more social media posts and exchanges, together with investigations and reports, books and films.<sup>2</sup> Fundamentally, the events centred on the body of a black youth with two discursive afterlives. The US Department of Justice issued two reports in March 2015. The Investigation of the Ferguson Police Department documented how police undermined community trust, noting a 'pattern of stops without reasonable suspicion and arrests without probable cause' coupled with a fixation on 'revenue generation' (DoJ 2015a, 2). Activists read this as a vindication of their claim that black bodies are unjustly targeted by racialized state violence. However, the second Department of Justice (2015b) report presented evidence from the three autopsies conducted on Brown's body, together with eyewitness statements, DNA, ballistic and crime-scene analysis. The report concluded that there was no prosecutive merit in charging Wilson. Apparently, several eyewitnesses lied: Michael Brown was not shot while attempting to surrender with his hands up. Juridical evidence collided with the sociological reality of activists in a battle over facts. As if to highlight the impossibility of neutrality, activist and journalist Jonathan Capeheart (2015) changed sides, reflecting on the 'uncomfortable

truth' that this youth was perhaps 'someone who would otherwise offend our sense of right and wrong'.

The shooting in Ferguson, then, seems to illuminate an entire world of law enforcement in one kinetic moment. For some commentators, the violence between a policeman and a youth could be read as the outcome of processes undermining law and order. For other commentators, the ending of a life that matters should be situated among the deaths and incarcerations of a great many black youths in a racialized and structurally violent order. This is a moment in which the voices of anthropologists and urban ethnographers should be of great relevance.

Recently, several anthropologists have illuminated the kinetic interactions between security forces and poor communities, from Didier Fassin's (2013) study of policing in Paris to Daniel Goldstein's (2016) exemplary study of private street-level security in Bolivia's Cochabamba. But efforts to locate structural violence in policing encounters are articulated in far more sensational terms by urban ethnographers. For example, in her controversial study On the Run: Fugitive Life in an American City, Alice Goffman portrays court orders and law enforcement as arriving in poor Philadelphia neighbourhoods in the form of 'a battering ram knocking [your] door at three in the morning' (Goffman 2014, 59). But the attention-grabbing focus on policing encounters may ultimately prove to be limiting. Goffman and others promise to reveal the deep meaning of police encounters ethnographically but instead offer only one form of evidence (videre), that which can be seen directly. Such evidence can be misleadingly vivid and thus distract from broader transformations. This chapter is an effort to call attention to another body of evidence shaping policing, one conveyed in a crucial if later chapter in the story of social unrest in Ferguson. Today, momentous experiments are ongoing in police departments around the world. The St. Louis County Police Department is one such laboratory. Predictive policing is being tested in the neighbourhoods surrounding Ferguson – the use of data and software to stop crimes before they actually happen. Predictive policing is not simply crime mapping or neighbourhood profiling.<sup>4</sup> Rather, it is a particular way of conceptualising the behaviour of human beings and their near-future actions. Thus, the socialscientific question before us is this: what if the robbery in the Ferguson Market and Liquor had never occurred?

It may be possible to discuss predictive policing by exploring it ethnographically from the perspective of a specific law enforcement institution. This is not the approach that I wish to pursue here. Indeed, for the purposes of this essay at least, I want to avoid framing a world of stable cultural institutions that resist or accommodate change from the outside. Instead, I wish to tell a broader and more elusive story that takes us from the nineteenth-century to the present day and from Los Angeles to other international cities such as those in the UK. It is a story about specific efforts to think about human life itself using statistics, software and anthropology, all to produce a new body of evidence, a new criminal anthropology.<sup>5</sup>

In this chapter, I give a brief overview of the anthropology of policing, which highlights the important role of governmental reasoning. My concern, drawing from the work of Michel Foucault, is to show that pioneering statisticians, operating within what one might term apparatuses of security, brought together data and visualizations to the point of noting anthropological patterns and phenomena. Thereafter, I explore contemporary predictive policing by focusing on its evidential underpinnings in anthropology, before turning to a specific example in the UK. The conclusion I offer is this: ethnographic treatments of policing and security institutions must be augmented by multisited studies that track the discourses and practices – bodies of

evidence – that move along the fault lines of societies. Anthropological concepts are crucial to police restructuring in the contemporary moment, and here I show evidence of a new criminal anthropology.

# **Anthropology of Policing as Security**

The unrest in Ferguson, Missouri must be situated alongside numerous international protests against policing during the past two decades, from the violence in France in 2005 to the UK riots in 2011, and from the 2013 Gezi Park revolts in Turkey to recent protests by lawyers in Lahore. Of course, one should hardly be surprised to find the so-called thin blue line running along global fault lines of race, gender, class and inequality, or find that new media forms and video records are disturbing older ways of weighing evidence. It does seem surprising, however, that the anthropology of policing remains a small, recent and somewhat narrow field to this day. The explanation for this can be found in a cursory review of early anthropological studies that mention policing. Therein one generally finds few discussions of police as a distinct societal institution and numerous discussions of 'customary' law or 'traditional' justice (e.g. Lowie 1912; Fogg 1942; Eggan 1956). One of the key topics in the anthropology of policing, then, is the problematic intersection in the Venn diagram between a 'modern' but culturally sensitive institutional form and the varieties and alternatives available in people's efforts to maintain and enforce social order (see also Comaroff and Comaroff 2004).

In a recent overview, John Comaroff (2013) also noted the relatively few theoretical touchstones used in the anthropology of policing. Of course, several scholars have unsettled the Weber-inspired perspective that police embody legitimate state force by drawing on fieldwork in contexts where policing is paramilitary, private, or even absent (see Weber 1946; e.g. Goldstein 2016). Other anthropologists probe the spectral law-making and law-preserving violence beyond the state (see Benjamin 1978; Derrida 2002; e.g. Jauregui 2013). And, of late, anthropologists inspired by the work of Michel Foucault are attending to governmentality, normalisation, surveillance and resistance. But most of these ethnographic studies are attempts to contextualize and understand the everyday encounters between the police and the policed. But what if international transformations now involve efforts to change the nature of everyday law enforcement, such that many encounters will be cancelled out before they even occur? According to an influential RAND Corporation report, Moving toward the Future of Policing, momentous changes are sweeping through law enforcement and are embodied in intelligence-led and predictive policing (Treverton et al 2011). So, how might we approach the shifting international law enforcement landscape without submitting to the seductive power of technology or corporate advocacy? Some might suggest that predictive policing is really little more than a fad, a species of the contemporary endowed with more significance than it deserves by neo-liberalism or biopolitics? Here, following Paul Rabinow and Nicholas Rose (2006), I propose looking to Michel Foucault's lectures on security for starting points rather than all-explaining conclusions.

In his 1978 lectures at the *Collége de France*, Michel Foucault recognizes the illusion of permanence staged by modern policing institutions. He excavates the broad understanding of order and force that characterized seventeenth and early eighteenth-century European uses of 'police', which encompassed inequalities, medicine and hygiene, charity, urbanization and circulation, though not necessarily justice.

Generally speaking, what police has to govern, its fundamental object, is all the forms of, let's say, men's coexistence with each other. It is the fact that they live together, reproduce, and that each of them needs a certain amount of food and air to live, to subsist; it is the fact that they work alongside each other at different or similar professions, and also that they exist in a space of circulation; to use a word that is anachronistic in relation to the speculations of the time, police must take responsibility for all of this kind of sociality (socialité) (Foucault 2007, 422).

There is a striking family resemblance here between 'police' and the term policy as it is used today. Indeed, Gregory Feldman reads Foucault as commenting on the historical flourishing of 'indefinite regulation, of permanent, continually renewed, and increasingly detailed regulation ... – policy and administration in a biopolitical society' (Feldman 2014, 76). But here I wish to point to other insights that are of help when exploring contemporary predictive policing.

Foucault's analysis of policing history is predicated by discussion of Ireland as a colonial laboratory. As is well known, before Sir Robert Peel established the world-leading London Metropolitan Police in 1829 experiments had already taken place in John Bull's other island. Ireland offered 'favorable' conditions in which to test technologies of rule such as the modern governmental statistics as developed by William Petty (1970 [1691]) and others. On the back of many years spent surveying and producing extraordinarily detailed maps (all while carpet bagging aggressively), Petty's political arithmetic unleashed the power of statistics to count 'the worth of men' (Landsdowne 1928, 153). Statistics provided the 'technical knowledge that describes the reality of the state itself' (Foucault 2007, 354). Following Petty, technical reality could be conceived, perceived and acted upon, and actions could occur with reference to how reality might change in the near future.

William Petty's nascent efforts to produce crime data were later improved upon in nineteenth-century France, especially the capacity to visualize such data. From the 1820s onwards, statisticians represented crimes, suicides and even school instruction levels using choropleth maps. Later, more technically precise efforts flowed, from Adolphe Quetelet's social physics of the average man (*l'homme moyen*) to Henry Mayhew's statistical and ethnographic portraits of British poverty and criminality. According to historian Mary Poovey (1991), early debates among statisticians show a concern for objectivity and reluctance enter into discussions of causation. Yet, many were struck by the power of data *qua* data to not only count the *worth* of men but also to capture the always-emergent *sociality* of men. William Cooke Taylor's reflections on French crime data are illustrative in this regard:

There is no better attested, nor more astonishing, record in history, than the sudden appearance of a disposition to commit some certain crime in a definite manner spreading like a contagious disease, reaching a fearful height in defiance of every effort to repress it, and then gradually sinking into oblivion. The madness of witch-finding in our country and in New England, the crime of poisoning in France when the *Chambres Ardentes* were established, the rick-burning in England within our own memory, are familiar examples. Does not this seem to prove that we might reckon a certain sympathy or principle of imitation among the leading incentives to crime? (Taylor 1835, 213)

Taylor's proto-anthropology may seem to be a long way from software-based policing in St. Louis County in the wake of the Michael Brown shooting, but the distance is closed by a simple set of observations. First in colonial laboratories like Ireland and thereafter in the metropolitan heartlands of empire we find the coeval development of social data gathering, mapping and statistical reasoning. This process occurs prior to the emergence of modern policing institutions and, in fact, provides key conditions for the possibility of those institutions. Of course, this is not to suggest a Whig history of our inevitable progress towards enlightenment and reason. Rather, my aim is to situate policing within the expansion of governmental statistical reasoning and thus note the power of data *qua* data in the history of efforts to secure populations. Nineteenth-century scholars recognised that data had emergent qualities and might reveal patters in human behaviour, and thus data, statistical reasoning and visualization could establish a near-future milieu in which to act. Foucault describes such milieus as being fundamental to apparatuses of security that operate by,

standing back sufficiently so that one can grasp the point at which things are taking place, whether or not they are desirable. This means trying to grasp them at the level of their nature ..., grasping them at the level of their effective reality. The mechanism of security works on the basis of this reality, [responding] to a reality in such a way that this response cancels out the reality to which it responds – nullifies it, or limits, checks, or regulates it. (Foucault 2007, 46-47).

Efforts in data gathering, crime mapping, and criminological theory certainly expanded throughout the twentieth century. But ongoing experiments in predictive policing, such as in St. Louis County, have implications far beyond the modern police institutions and crime-busting efforts. Predictive policing is a specific assemblage within broader apparatuses of security that targets life itself with a new criminal anthropology.

# The Anthropologist as (Police) Hero

In order to tell the story of contemporary predictive policing one must attend to the central role of Jeffrey Brantingham, UCLA anthropologist and expert on the environmental adaptations of hunter-gatherers in Northern Tibet. Brantingham's anthropological fieldwork convinced him that the behavioural patterns of humans are less elaborate and more predictable than one might assume. If hunter-gatherer behaviours are based on established patterns then why not attempt to predict the behaviour of an urban forager hunting a Mercedes Benz?

Brantingham explored the LA crime data and developed a strong relationship with the city's police. He drew together expert collaborators like mathematician George Mohler and criminologist and former RAND analyst George Tita. Their work suggested that neighbourhoods were at greater risk of crime in the wake of a crime. In nineteenth-century terms, they uncovered a principle of sympathy or imitation. But in quantitative terms, the crime patterns seemed more approachable as earthquakes and aftershocks, so they repurposed mathematical earthquake models. The key concept deployed was self-excitation: in data the existence of a crime self-excites the possibility of a future crime, which can be shown in time and space, in 500 x 500 sq ft digital boxes to be precise.

The LAPD were quick to begin experimenting with predictive policing, and

cops soon found themselves patrolling the near future. Early results seemed remarkable, and so also was the press coverage. Brantingham and his colleagues launched PredPol, a cloud-based software company, which made *Time Magazine's* list of the fifty top inventions of 2011. Today, the services offered by PredPol are being used in numerous international law enforcement agencies. There are numerous other predictive systems in operation, but most share certain assumptions about human behaviour rooted in evolutionary anthropology.

In order to understand predictive policing it is useful to first consider Brantingham's evolutionary approach to crime. In a recent and illustrative paper on 'prey selection' among LA's car thieves, Brantingham (2013) proposes that contemporary crime shows similar patterns to age-old foraging behaviours. These patterns do not arise from rational choices but, rather, from an evolutionary disposition to learn the long-term costs and benefits involved in selecting, encountering and processing or handling prey. In other words, when an array of choices is presented, humans make sub-optimal choices due to a long evolutionary history of necessity. If this sounds like an effort to equate human behaviour with algorithms then one will not be surprised when Brantingham (2013, 2) speaks of 'cognitive scripts' that allow one to make decisions on the suitability of prev. When all of this reasoning is translated into data on car theft one finds that foragers do seem to make sub-optimal choices and respond 'primarily to environmental abundance' (2013,10). In short, a Mercedes Benz may be more desirable, but it is the Nissan or the Honda that is most likely to vanish from a driveway. Car theft, burglary, and other forms of petty crime can be modelled using this style of reasoning, and advanced models that consider 'self-exciting points' can potentially predict gang behaviour, or even the casualties of terrorist attacks (Brantingham and Short 2011).

Today, predictive policing is used around the world, but Predpol remains most closely associated with US cities, from Memphis to Minneapolis and Miami. The early adopters were the city of Santa Cruz and LA's Foothill Division. There, one morning in LA, the computer was switched on, and officers were suddenly less responsible for their patrols. Instead, during morning briefings patrol officers received a map indicating the concentration areas. Officers were expected to spend as much time as possible on patrol in their box. According to all sound analysis, the crime rate dropped since the roll-out of predictive policing. For Jeffrey Brantingham, the core issues at stake are clear. Speaking at a 2014 UCLA panel on contemporary crime and criminality, he had this to say:

The challenge that I set out a number of years ago with collaborators in mathematics was really to say ... to the police, 'Listen we understand why the crime pattern is evolving, and if you use that information you can get out ahead of the crime, and do something to prevent it!' So, I'm a strong believer in the idea that prevention is much better than waiting for the crime to happen, trying to find out who did it, and incarcerating them. We know the limits of incarceration. ...

But, what's driving the behaviour, what's driving the crime? Here again I would say that I have a slightly different perspective. It's not ethnographic. It's more thinking about ... the commonalities that describe all burglaries, regardless of whether you're looking at them in Los Angeles or Chicago, or London or Tel Aviv. ... [Y]ou would be surprised how similar criminals are regardless of where you are looking. ... A great example of this

is ... most offenders commit the crime in the immediate vicinity of where they live, where they work or play. [...]

Los Angeles Police Department has been doing what you'd call predictive policing for the past two and a half years. ... You have a little box, a 500 x 500 sq ft box that basically says this is where the risk of crime today is highest. [...] It's often not recognized that 80-90% of the crime that police respond to comes from public reporting. The number of crimes that police actually discover on their own is very, very small. Policing is really a public-police partnership (Brantingham 2014).

There is certainly much of interest in this statement, but before unpacking the contents it is worth observing the gulf between Brantingham's remarks and the portraits painted in recent ethnographies of policing.

As noted earlier, there is a genre within the broad field of urban ethnography that focuses on the mundane and kinetic interactions between police and the marginalized poor. In Alice Goffman's (2014) controversial study of fugitives in Philadelphia, policing is rendered as structurally violent occupation characterized by constant stop-and-search, circling helicopters and CCTV cameras. Though a complex work, Didier Fassin's Enforcing Order (2013) opens with similar images drawn from his work on policing Parisian banlieux. For Fassin, police stop-and-search tactics are mundane but structurally violent in that they target – through embodiment and internalization – the bodies of racialized youths, such that 'the individual is ashamed of the violence to which he has been subjected, and feels guilty of a sin that he has not committed' (2013, 8). When racialized and marginalized youths encounter police, then, they are confronted by culturally coded and embodied behaviours. Police actions 'depend very largely on their personal history, the training they have undergone, the supervision they receive, the conditions of work imposed on them, the tasks conferred by government policies, and the representations of the social world that society produces' (Fassin 2013, 24). But what happens, to paraphrase Eric Wolf, if we take cognisance of the processes that transcend separate cases, moving through and beyond them and transforming them as they proceed? In this case, we are looking at processes that aim to cancel out difficult cases before they arise.

Looking at contemporary policing – especially in the western world, but elsewhere also – Jeffrey Brantingham's cognitive map of law enforcement is rather different to the one that circulates among urban ethnographers. When looking at today's Los Angeles, he sees a city with a reduced serious crime rate that is facing decisions about the efficient deployment of law enforcement resources. Responding to Brantingham at the 2014 UCLA panel, criminologist Daniel Fessler exemplified the new intelligence-led approach to policing:

There's substantial debate in criminology as to what has led to the drop in crime, but I think that a case can be made that policing practices are in part responsible: ... redeployment of resources, community-based policing; as you know here in Los Angeles we've had a radical shift following civil unrest in the way that the LAPD tried to connect to communities. So one of the reasons that [predictive policing] is so effective is because the potential offender is making calculations about probability of getting caught, and if you see police officers in your community at about the time that you were thinking about offending then that really does deter crime ... (Fessler 2014).

Doubtless, in response and with events such as Ferguson in mind, commentators will note the 'disappearance' of young marginalized and racialized youths from city streets, those taken into the arms of the criminal justice systems across many westernworld countries. But many more questions might also be posed, from the question of the displacement of crime from heavily policed neighbourhoods to other streets to the question of displacement from street crime to more 'sophisticated' forms of behaviour. During 2013 and 2014 I set out to ask these questions of senior police in the USA and UK in a series of interviews. Those semi-formal interviews led to invitations to examine predictive policing systems in operation in UK cities. I became interested not in PredPol the company but rather in alternative approaches to intelligence-led community policing, especially in law enforcement institutions where those approaches were largely bottom-up and even suspicious new technology fixes. Below, I briefly discuss research conducted with a police force in a large northern UK city. I propose using this case example to tease out ways to study predictive policing as a specific techno-social assemblage – and a body of evidence – rather than as an empirical example in itself.

# **Criminal Anthropology in Action**

The numbers are there to see, especially for burglary and car theft – it works. But ... it's weird, like science fiction. I mean, one day you turn on the computer and, well, now it's the computer running things. (Interview [informal] with police technician 2013)

It took Dave a while to adjust to there being an anthropologist in his office. He blinked rapidly in what seemed to be an effort to wish me away. That day police headquarters was a tense place. The borough was being evaluated as part of a national quality initiative. Dave was plainly hoping that the Analysis Unit he directed would escape the attention of senior officers conducting the site visit. He was quite literally attempting to keep his head down when his manager entered his office unannounced and introduced me as a visiting researcher intending to study crime mapping. Dave's manager disappeared with, 'Top brass wants you to give him what he needs, ok?' The top brass in question was Sir Peter, a senior figure who blessed my short project on alternative approaches to predictive policing. At first I was surprised by the degree of access granted to me, but it soon became clear that there were plenty of opportunities for me to bump into the evaluators, and predictive crime mapping was the borough stand-out initiative. Although the technical work of the Analysis Unit was regarded a somewhat mysterious by seasoned officers, headquarters staff described it as a 'miracle factory' – certain types of crime had been driven down, by 38% in the case of burglaries, and, after all, 'the numbers don't lie'.

Well before my first visit, I interviewed several police officers by phone or over Skype to become familiar with current operations and policing history. I learned about the nineteenth-century slum gangs – mostly Irish migrants –, the conflicts between black British and West Indian youths, football hooliganism, and the drug-related crime wave that swept the city during the 1990s. But Dave seemed vague on the historical context in which he worked. He graduated a few years previously from a local university where he specialised in criminology and completed advanced training in geographical information systems. He joined the borough police force as a civilian employee, sensing in the role of analyst the opportunity to strengthen his research network and gain experience as a 'practitioner' before hunting for an academic post. <sup>10</sup>

Until 2010, the Analysis Unit was dedicated to crime mapping, mostly efforts to identify 'hot spots' based on historical cases in a borough with a quarter of a million residents spread over forty square miles. Dave began working with a few seasoned police officers who were seeking to develop their skills, together with two young graduates. I felt sure that he would have interesting stories about the early days, especially efforts to implement predictive techniques shoulder to shoulder with policemen trained to walk the beat, cultivate street-level contacts and follow hunches. But he seemed vague about those early moments. 'So,' I eventually asked, 'how exactly does the system work, and how does it differ from the American approach?' Dave's demeanour changed. The turned his chair to the two large monitors on his desk with, 'Watch this!' He pulled up a real-time map of the borough and talked me through the image of city, explaining with great intensity how the different neighbourhoods yielded data and interacted with one another.

The policing borough has four distinct spaces that dominated its cardinal points. To the north, the district abuts a large public housing area, a 'sink hole estate' with a very high general crime rate and several gun crime incidents each year. Nearly 90% of residents in the policing borough identified as 'white' in official statistics, but over half of the population in the public housing area identified as 'black' or 'south Asian'. To the east, a large football stadium dominates the urban landscape, while to the west an enormous shopping mall and retail park extends on both sides of the main road. The stadium and shopping mall are areas with few crimes as they are saturated with CCTVs and have significant private security in place. Private security personnel in the mall did not feel free to speak to researchers formally, though one individual did grab my elbow and confide, 'We keep the crime out by not letting certain people in!' (Informal conversation 2013) Crime, as Dave explained, is generally concentrated to the north, in the centre of the borough, and occasionally in the south of the district. To the south one finds a large area composed of several affluent neighbourhoods. These are gated communities - 'footballers' wives,' according to Dave. The crime rate is low in those neighbourhoods, though in recent years several violent home invasions have been recorded. From the analysts perspective these broad spatial features can be understood as exercising real-time forces that manifest themselves in data – and the data is itself emergent.

Starting in 2010, the Analysis Unit began working to normalise historical data and make crime reporting more efficient. Relatively quickly, Dave and his colleagues were able to produce detailed daily maps that indicated the likely locations of future crimes. The maps are provided to patrols during morning briefings and indicate risk (referred to as 'heat') by means of coloured circles – red indicates high-risk. The intensity of the colour indicates the likelihood of crime in a particular area based on spatio-temporal relationships to recent crimes and historical data. The theoretical underpinning for this approach is found in this often-cited recommendation by UK criminologists:

In domestic burglary, for example, the danger of a further is greatest at the home of the original victim and spreads out some 400 meters, but disappears over six weeks to two months. ... Instead of mapping past events in the conventional way we should map the risk they generate for nearby homes, with the map being dynamic to reflect how the risk declines over time. ... Forecasts can be displayed using a Geographical Information System (GIS) and overlain on a map of the relevant area, allowing patrolling and other resources to be deployed to the areas of highest predicted risk.

While it is an unhappy comparison, the logic mirrors that used in the culling of farm animals in epidemics of foot and mouth disease. Culling only animals on farms where there is an outbreak ignores the way in which disease spreads (Ross and Pease 2008, 314).

Patrols are given copies of the map – each marked with the Crown copyright of the *Official Secrets Act*, 1911 – that will determine where they should spend the majority of their time. And the maps are of course 'smart' in that specific details of recent crimes and near-future risks appear in dialogue boxes when one interfaces with the maps live in the system. Moreover, to assist in this process of making the maps 'real', officers' radios and cars are GPS locatable and they are expected to be where the system suggests they be. Importantly, patrols are not expected to simply cruise about in their designated circles.

Again following Ross and Pease (2008), borough resources are assigned on a variation on the so-called Pareto Principle, which holds that a small number of things are responsible for a large number of outcomes. A few criminals commit a large number of crimes, and the spatial distribution of crime will be limited by our optimal foragers. Moreover, a small number of victims are also responsible for the majority of cases of victimization. In other words, we have the phenomena of repeat victimization. Thus, the borough's crime maps represent future crimes and future victims. The style of reasoning here has led the force to 'cocoon' neighbourhoods where, say, a burglary occurred. Police patrol the streets visibly; contact with the community intensifies; public service workers are encouraged to wear high-visibility clothing; and advice on 'target hardening' is given to victims, potential victims and nearby residents.

Over the past several years, extraordinary successes have been attributed to the approach taken in this borough. In the USA, cities that have experimented with PredPol have shown decreases in some crimes of up to 25%. In this UK borough, burglary is down by 38%; car theft is down by 29%, and all at zero cost. With some justification, a senior officer claimed that the results are attributable to organizational change, and targeted patrols spurred by new technology implementation:

Future policing is about effective management, knowing your organization and how to implement change across it, across the different skill sets, while ensuring buy-in. It's about service and evaluating that service, asking the tough questions (interview 2013).

With some justification, outside commentators question the 'displacement' of crime to other boroughs – although there is no substantive evidence to support this theory – or to other forms of crime. Car theft does seem to be declining internationally as technology changes, and thefts from cars are increasing, but the borough seems to counter such displacement by targeting the patterns of criminal foragers. However, the most accurate critical evaluations seem to be implicit in the muted comments of police men and women on patrol. I spoke to several officers in this borough and in other cities in the UK and USA. During a conversation in 2013, one officer synthesised the on-the-ground perspective in one question, 'Isn't this just community policing?' (Interview 2013)

There is a new body of evidence here, one that exceeds the evidence (*videre*) of the sociologically visible and even the relations of cause and effect in intelligence-led and predictive policing. We must also attend to evidence in more Foucauldian

terms, 'those évidences on which our knowledges, our agreements, our practices, rest', and thus attend to evidence of events unseen (Foucault in Perrot 1980: 44). Contemporary approaches such as predictive policing constitute their own milieu and evidential regimes but they are also nested in broader institutional configurations and taken-for-granted ways of perceiving and acting in the world. On the one hand, then, as I carried out my research, I watched as a law enforcement organization shifted towards predictive policing, a catalyst for changes in reasoning, management, resource allocation and actual patrols. On the ground, police seemed to be driving down crime by 'doing nothing,' as one veteran officer put it. Another reflected, 'These days we get calls about barkin' dogs. Why don't you go around to your neighbour, knock on the door, and speak to them? Somethin's up there. And, what's that got to do with us?' (Interview 2013) But for all the successes represented in management charts and reports, crime did not go away, especially violent and organized crimes that are not connected with so-called optimal foragers. In the gated communities to the south of the borough, residents (at least those few I could find to speak to) lived in fear of the rare but terrifying home invasions by professional gangs that bring the threat of violence along with metal cutters and automatic weapons. Those residents call for tougher laws and better armed response. Residents in the poor and racialized north of the borough felt that they were under 'surveillance'. They feared local drug dealers and disliked the heavy-handed police who occasionally screeched into their estate. And, what of the perspective of those police who deal with non-foragers? The extracts below are from ethnographic notes taken during November 2013 and show the predictive system in operation from the perspective of an elite tactical response unit.

#### 11.13

I've just left the chief's office and am waited in an anteroom. I'm thinking that I'll never get to see things from the side of patrols unless I talk to police in other boroughs and cities. The GIS guys attributed 79% of all burglaries to 'optimal foragers'. They say that they have driven down burglaries by 61% in recent months! We all have the same questions. Is it true? Is this about changing patrols? Is it sustainable? Are crimes simply being displaced to other districts? What do the patrol guys think? Will I be given permission to work with them?

The chief's secretary appears ... I'm informed that I will be allocated specific times to interview patrols, but I'm also given permission to 'hang out' with the guys in tactical. ...

#### 15.13

The tactical unit are 'suiting up'. One group will be training while the others circle around where the predictive maps indicate the greatest risks are greatest. The men and women in tactical quietly go about their roles. Their no nonsense offices and equipment rooms are in good order, and their dark uniforms and visible weapons give them the appearance of soldiers. The unit commander is curious to know exactly what I'm observing. We talk for some time about my previous experiences studying counterterrorist operations. He doesn't blink. I mention my lengthy discussions with Dave. 'Yeah,' he says, 'the Analysis, right? Dave ...' He places the daily predictive heat map on the table, and as if on cue three other officers gather around. 'Our radios are tagged,' one says, 'and they know if you're not in the circle at the correct time'. 'I haven't

noticed a decrease in crime, to be honest', volunteered another, 'it's just that now you can't nip home'. We laugh for a moment or two. 'But I suppose they're right, I mean the numbers are there,' says the unit commander. Everyone stares at the map silently. One officer points at a time and heat-sensitive circle. He hesitates before asking, 'What do the colours mean exactly?' Everyone knew what to do, but nobody seemed to know what they knew.

'So, the maps tell you what to do now? But what was it like before?' I asked. 'We used to go looking for trouble', an older officer said. We knew the people and where to look, and what to look for, you know, before something kicked off.' 'What about now?' I asked. 'We stay in our little coloured circle'. 'Maybe it's working'. 'What about you?' I asked the unit commander, 'If it's so restrictive, why do you still do this job?' 'Ah,' he said, 'they left us with the good bit: we just love kicking down doors!'

But why is a tactical unit thriving alongside software-mediated policing and alongside community policing in the form of target hardening, the co-opting of local public service workers and the 'cocooning' of neighbourhoods. If Foucault (2007) is right in suggesting that to police is to take responsibility for various forms of sociality (socialité), then one may simply observe that this responsibility is unevenly distributed and received. Some are gently cocooned against the near future, while darker forces circle around and occasionally produce kinetic encounters. It may well be the case that this new criminal anthropology is front and centre in a redistribution of societal security.

## **Concluding remarks**

As protests against racialized and violent policing continue around the world, many of which cite the shooting of Michael Brown in Missouri, it is all too easy to fold contemporary predictive policing initiatives into a pre-existing image of the world. Predictive systems such as PredPol are not old wine in a new bottle, contemporary software licences for long-standing efforts to profile the poor. 11 Here I have attended to the new criminal anthropology encoded in such systems as indexing broader transformations in how societal security is distributed. Of course, the effects of redistribution will be felt unevenly. Just as software will not fix institutional racism, even if implemented well technological solutions may simply result in more stops, more arrests and more racialized youths in prison. And, I do not wish to elide the danger that, as one research participant put it, one 'day you turn on the computer and, well, now it's the computer running things' (interview 2013). There is certainly a danger of so-called surveillance creep together with instructions into privacy and civil liberties. But perhaps the most widely discussed danger arises when one considers the range of functions that can be added to poly-functional predictive systems. Most predictive systems target the spatio-temporal dimensions of human behavioural patterns, not he persons themselves. Recently, and mainly in the United States, systems have begun to include personal information gained from data mining in order to forewarn possible future offenders of the consequences of their current actions. According to a New York Times report, analysts are now looking at the predictive qualities of social networks that include, 'previous arrests; unemployment; an unstable home life; friends and relatives who have been killed, are in prison or have gang ties; and problems with drugs or alcohol' (Eligon and Williams 2015). 12

Having said this, if the critical social sciences simply engage with new policing and security technologies in terms of their possible nefarious uses we will lose the possibility of genuine critique, by which I mean an understanding of the core assumptions from which those technologies emerged and the possible alternatives available at root. It may be possible that the current obsession with policing encounters in urban ethnography is limiting our capacity to engage in genuine critique because we are not attending to the transformations that are occurring more broadly. Even if we refute the answer given by advocates of predictive solutions, we must ask ourselves: what if the robbery in the Ferguson Market and Liquor had never occurred? The rise of a new criminal anthropology that seeks to cancel out such encounters before they occur is one transformation, and the reliance on new configurations of soft and hard policing is another related transformation. This essay opened with an epigraph from Gregory Bateson, one of the earliest anthropologists to engage openly with the positive and negative potential of new technology. Bateson saw in social computing the potential hope for humanity, but he worried that its style of reasoning would supersede our own and that we would be 'a little less responsible'. He concluded thus, 'if you do what the computer advises, you assert by that move that you support the rules of the game which you fed into the computer. You have affirmed the rules of that game. The problem is to *change* the rules' (Bateson 1972, 481-482 passim).

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#### **Notes**

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<sup>&</sup>lt;sup>1</sup> In extended footage, residents audibly dispute this version of events.

<sup>&</sup>lt;sup>2</sup> Indeed, one could describe the shooting of Michael Brown as a 'critical event' (Das 1995) that opened the world to evaluation and inaugurated new modalities of action that obtain to this day.

<sup>&</sup>lt;sup>3</sup> Following the philosopher Roderick Chrisholm, one might suggest here not only a heuristic – an appeal to vivid detail – but also the capacity of perception in 'insure' evidence in a closed system, one's 'body of evidence' (Chrisholm 1988: 84).

<sup>&</sup>lt;sup>4</sup> Several proiminent and widely circulated papers on predictive policing have served up confusion rather than clarity. Most notably, 'Predictive Policing' by Brayne, Rosenblat and Boyd (2015) confuses crime mapping and predictive policing and discusses opportunity theory rather than (sub-)optimal forager theory.

<sup>&</sup>lt;sup>5</sup> David G. Horn (2003) describes the powerful role played by nineteenth and early twentieth-century criminal anthropologists in co-producing the criminal body as an expert source of evidence about the world. Of course, the pseudo-science of Cesare Italian criminologist Lombroso and others was predictive only in the sense of imagining atavistic inheritances. Thus, even his contemporaries in France wrote off the Italian 'positivists', describing their work as akin to coffee – stimulating, but no nutritional value!

<sup>&</sup>lt;sup>6</sup> The RAND report (2011) offers a Whig historical narrative. It begins with tales from the misty era of corruption and fragmentation before describing the so-called reform

era's bureaucratic institutionalization, professionalization and large-scale data gathering. Indeed, by the mid-twentieth century, according to historian Christopher Wilson 'proper procedure' became shorthand for efforts to prevent 'future criminal actions by following an actuarial logic based on past cases' (2000: 63). But the RAND report does not dwell on the actuarial power of the filing cabinet or the hunches of the maverick cop. Rather, twentieth-century law enforcement is criticised as bureaucracy at its worst: moribund and yet metastasising. However, today, apparently, patrician public services are being compelled to change by revolutionary forces: privatisation, together with intelligence-led and predictive policing. <sup>7</sup> Recently, several anthropologists have drawn overstated conclusions from Foucault's (2007) lectures on security. Elizabeth Povinelli (2014) locates 'the people' in Foucault's lectures on security and population as a reservoir of potential difference and freedom. So also does Ilana Feldman in her recent study of Gaza under Egyptian rule, Police Encounters (2015), wherein a 'society of security' is seen to block the politics of the polis. Of course, one must first acknowledge that Foucault's brief remarks on security ask questions rather than supply conclusions, and he ultimately left the topic of security behind (see Bigo 2008). Having done so, it is important to note that 'the people' are not a reservoir for wishful thinking in Foucault's writing. So also with 'freedom', and, accordingly, he suggests that mechanisms of security became vital for governing and for freedom or 'freedom within governmentality, not only as the right of individuals legitimately opposed to the power, usurpations, and abuses of the sovereign or the government, but as an element that has become indispensable to governmentality itself. Henceforth, a condition of governing well is that freedom, or certain forms of freedom, are really respected. Failing to respect freedom is not only an abuse of rights with regard to the law, it is above all ignorance

<sup>8</sup> And here, one should underscore the fact that governmental innovations in knowledge and rule occurred in contexts of empire and moved back and forth along the route ways carved by colonization. Michel Foucault (2003) recognized this as the 'boomerang effect' of colonial governance.

of how to govern properly. The integration of freedom, and the specific limits to this freedom within the field of governmental practice has now become an imperative'

<sup>9</sup> All names hereafter are pseudonyms.

(Foucault 2007: 451).

Today, police officers face fast-changing and complex threats not from the perspective of coherent institutions but, rather, as the front line of service provision assemblages. Technologies such as public video-surveillance are often outsourced, and even the back office is now potentially differentiated. For example, in 2012 the private security company G4S was contracted to build and staff many functions within a police station by the Lincolnshire Police Authority. The Police Authority claimed that the move would result in 'the leanest police force in Britain,' capable of delivering 'services' at an even lower 'cost per head of population' (see Plimmer & Warrell 2012:4; see also Treverton et al. 2011:34).

<sup>11</sup> If one were tempted to propose that the entire process is simply a glossy version of 'profiling' poor neighbourhoods then one would entirely miss the evidence being represented. In short, criminals such as car thieves will respond to environmental abundance; the real-time crime maps show where crimes will occur not where criminals reside, for now at least.

<sup>&</sup>lt;sup>12</sup> Indeed, one might situate such approaches alongside broader efforts to look for risky personality types using neurological evidence, the 'new diagram' in criminal justice identified by Nickolas Rose (2010) as 'risky brains'.