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Title: 'Getting around and getting on: Self-interested resistance to technology in law enforcement contexts'

Author: Helen Wells (corresponding author)

Affiliation: Keele University

Email: h.m.wells@keele.ac.uk

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Abstract: This review considers the use of technology in law enforcement contexts, focusing on evidence of resistance to particular forms of intervention. Whilst 'Big Brother' and 'civil liberties' narratives dominate the academic discussion of opposition in this area, this paper focuses on reviewing evidence of the more routine adaptations that characterise many people's response to attempts to change their behaviour. Discussion of some frequently encountered technologies (including CCTV and speed cameras) is situated within a reflection on the changes in conceptualisations of both 'crime' and 'the criminal' observable over recent decades. Many acts of resistance within this context can, it is proposed, be understood not as examples of ideological opposition, but as rational and predominantly self-interested responses to these new conditions.

Getting around and getting on: Self-interested resistance to technology in law enforcement contexts

Introduction

This paper considers examples of the public's relationships with law enforcement technology, focusing on forms of public resistance against such interventions. The resistant strategies considered are, however, more practical and self-interested and have more modest intentions than challenges couched in 'Big Brother or 'civil liberties' terms which characterise mass protest or social movements (Coleman & McCahill, 2011). The discussion is located within changes in the conceptualisation of crime and criminals which have occurred over recent decades, and which have seen; a move away from a welfare based, transformative aim for criminal justice to more limited ambitions (Kemshall, 2003:16) an increasing responsibilisation of both offenders and victims, expected to take a rational approach to their own behaviour (Rose, 1996; Loader & Sparks, 2002); the emphasis on risk as a justification for interventions (Feeley & Simon, 1992, 1994); increases in regulation (furthering the disconnection from a moral basis to many laws) (ibid; McGuire, 2012:26); increased ontological insecurity and the need to actively construct and defend one's own identity (Giddens, 1991; Mythen, 2005); and optimism about the potential of technology to influence rational decision makers (Cornish & Clarke, 1987; Norris, 2012). Such developments, it is suggested, have inevitably led to an increase in the use of crime control technologies, but have also created the conditions in which low-level, daily acts of resistance to those technologies can flourish. The themes and practices of resistance explored here are based in the rational choices of (often) rational choice actors who, rather than accept the determinations of technology, take steps to avoid its effects in ways that allow them to continue with the behaviour they had previously rationally chosen to adopt. Rather than making the 'rationality mistake' (Barlow & Duncan, 1999), therefore, technological interventions may be guilty of not taking that presumed rationality far enough, or at least of assuming that the rational actor will choose to conform rather than to continue to offend if offending is the easiest option.

This is not confined to traditionally conceived offending 'others' but, by virtue of the shifts in conceptualisation noted above, also includes populations traditionally able to conceive of themselves as 'law-abiding' who now find their behaviour recast as 'risky' and hence problematised. The responses and concerns evidenced here are more "self-interested" (Marx, 2003) or "instrumental" (Marx, 2009) and individualised, than principled ideological resistance. They are often contradictory and demonstrate mixed enthusiasm for law enforcement based around the appeal of technology as a remedy for the problematic behaviour of others, coupled with a resistance to attempts to change personally convenient (though illegal) behaviour of our own. The paper therefore attempts to provide an overview of ideas of resistance that offer an alternative to discussions of technology in law enforcement contexts that characterise its use either in terms of technological appeal or collectivised, ideological resistance to surveillance.

Technology and Criminal Justice

Kearon identifies the period since the 1980s as witnessing the "proliferation of new technologies employed by criminal justice and other regulatory agencies" (2013: 415). Whether it be devices for deterring offenders or recording evidence of their transgressions (e.g. CCTV, speed cameras), devices for identifying 'risky' characteristics of individuals (e.g. ANPR), measures to prevent specific offences such as terrorism (e.g. airport body scanners) or interventions that target-harden previously attractive goods (e.g. phones that can be disabled if stolen, measures to prevent illegal downloading), machines are routinely deployed to deter or prevent certain behaviours. Considerable faith is placed in the ability of inanimate objects to change behaviour (by deterring, target hardening, recording, identifying) in ways that humans have, thus far, seemingly failed to do. This persists, it seems, even when those technologies demonstrably fail to live up to their promises (Haggerty, 2004; Kearon, 2013).

Whilst technology is understood to be progressive, efficient, effective, or even as a "silver bullet" (Marx, 1995) for crime problems, it is not universally welcomed. Resistance narratives, often originating in surveillance studies literature, use familiar tropes such as 'Big Brother', the emergence of a 'surveillance society' or claim infringements of civil liberties, but what of the driver who gets someone else to blow into an alcohol-monitor to provide a 'clean' sample of breath (Marx, 2003: 378), or the driver who responds to a warning from a speed camera detector by slowing down to the speed limit, before speeding up again (Corbett & Simon, 1999)? What are we to make of the individual who knows exactly where the CCTV cameras are and simply avoids them, or covers their face to hide their identity (Marx, 2003; Coleman & McCahill, 2011)? What of the individual who downloads music illegally because it can be done (Ulsperger, Hodges & Paul, 2010)? These individuals (some traditionally understood 'offenders', others not) are engaging in their own acts of resistance, though it is by no means certain that is correct to credit them with any kind of ideological underpinnings. Whilst these types of resistance are neglected, there is reason to suspect that they are both more common than ideologically informed responses, and more likely given recent changes in the conceptualisation of crime and criminals.

The reconceptualization of crime and criminals

The increasing use of technology must be viewed in relation to changes in the conceptualisation of crime and criminals which have occurred over recent decades. Bauman (1987) has observed that, from the 1970s and 1980s onwards, attempts at establishing intellectual legitimation for governance projects declined, with reliance placed instead on the promises of securing compliance through surveillance. Alongside this, a move away from a moralised, transformative aim for criminal justice to more limited ambitions has been widely observed (Feeley & Simon, 1992; Kemshall, 2003). The failure of the welfarist paradigm has seen

criminal justice successes recast and redefined, with efforts to rehabilitate and reform the individual no longer deemed necessary. Behavioural change, rather than attitude change is sufficient.

Parallel to this reinvention of success has been a reinvention of causation. Rather than a product of social or economic circumstances, crime is seen, from a neo-liberal perspective, as a choice. If offenders choose to commit crime, then their choices can be influenced. With offenders seen as rationally manipulable, technology becomes a logical method of influencing those choices (either in terms of prevention or deterrence) that is less resource intensive and more reliable than a human agent seeking to secure the same effect.

These reconceptualisations fit perfectly with a technologically-driven criminal justice infrastructure: the inability of technology to conceptualise and reflect issues such as intent or mitigation is unproblematic when a risk narrative operates, given that the prevention of risky behaviour becomes the end-goal and it is irrelevant whether that risky behaviour was intentionally engaged in or not (Wells, 2012: 33-34). Rather than a moral code, Lessig (1999: 89 cited in McGuire, 2012) suggests that the code associated with regulatory technologies and what *can* be done dominates producing "constraints that operate largely autonomously and according to technical rather than legal or normative imperatives." (McGuire, 2012:26). Crucially, technology "does this without reflection or debate nor any normative assessment of the desirability of our behaviour's being so constrained" (ibid: 26) and, it is suggested, our responses may also be increasingly lacking in normative consideration as a result. What can be done is done, displacing arguments (on both sides) about what should be done. Crime problems are thus rendered techno-fixable, in theory at least.

Furthermore, an increasing focus on 'risk' (rather than morality) as a characteristic determining punishable action can be traced, with 'dividuals' (Deleuze, 1995) viewed as collections of 'risk factors' (Haggerty, 2004: 222) rather than complete, moral, beings. Whole new behaviours become legitimate criminal justice targets because of their understanding in risk terms, and a growth in mala prohibita regulation, often based on strict liability legal principles, is inevitable. This (as well as broader trends of late modernity) leads to ontological insecurity, with identities no longer inherited or reliable, but needing constant construction and reconstruction. No longer is a law-abiding self-identity sufficient to protect its owner from criminalisation. Unintentional behaviours, behaviours that were previously treated as unproblematic, behaviours we do not feel are worthy of attention – all become fair game in this new and frightening world.

Whilst the potential offender is increasingly understood as a rational, calculating homo economicus, the potential victim is increasingly understood in the same terms and, at times, the difference between the two can be obscured. The responsibilised neo-liberal citizen is cajoled and enticed into purchasing technologically-based solutions that offer that elusive commodity 'security' (Zedner, 2009), with those unable or unwilling to do so being left to be, and feel, relatively less secure through their absence. Not only are they vulnerable, but they are increasingly "recast as imprudent and reckless, blameworthy and responsible for their own misfortune" (Kemshall, 2003:19). Whilst victimisation is to be resisted, therefore, so is criminalisation, with the latter potentially experienced as

the former (Wells, 2007). Whilst gadgets may be offered that claim to provide protection from the actions of criminals, marketed alongside them are similar products that may render one less vulnerable to 'victimisation' by the state itself (ibid). When the activities of others threaten the law-abiding or respectable identity, threaten to label one as risky, less worthy, even unemployable, it is likely that those activities will be resisted, whether they are the actions of criminals or the actions of the state in trying to label us as problematic. The successfully responsibilised citizen, therefore, may be expected to resist criminalisation as enthusiastically as they resist victimisation.

Of course, offenders respond to changes that affect their chances of success, and always have done (Coleman & McCahill, 2011; Felson, 2006). Burglars started wearing gloves when fingerprinting technologies were in their infancy and the history of situational crime prevention is one of move and counter-move by offenders (as well as victims) engaged in an "arms race" (Ekblom, 1997; Marx, 2003; McQuade, 2006). Furthermore, actors, on encountering technologies designed to shape their behaviour, do not operate on the basis of perfect knowledge about the costs and benefits associated with different courses of action (Cornish & Clarke, 1987), nor do they have perfect knowledge of the 'real' risks associated with the proscribed behaviour. Their limited knowledge is as likely to be about the limitations of the technology in front of them as it is about the rather obscure and intangible possible unpleasant outcomes associated with failing to comply. Why not, then, devote effort to negotiating the obstacle at minimum personal inconvenience, rather than abandon the advantageous behaviour? Should we not expect the street criminal to offend elsewhere rather than in the presence of a camera, the speeding driver to equip themselves with knowledge about 'safe' (camera-less) and 'dangerous' (camera-covered) locations, the airline passenger to attempt to circumvent security procedures rather than have to pay inflated amounts for a bottle of water in-flight? When, as considered above, law enforcement technologies are increasingly distant from moral appeals and normative rationalisations, isn't this kind of response only to be expected?

The acts of resistance explored here may be deemed "thin" resistance (Raby, 2005) in that they tend to take place in localised settings, rather than "thick" (whereby structural power is challenged). Others might more accurately characterise it as 'contestation' - "understood as those activities that undermine regulations and rules in a micro context" (Coleman & McCahill, 2011:146). Others have suggested that the term resistance "should be reserved for visible, collective acts that result in social change" (Hollander & Einwohner, 2004: 451) and not "everyday acts…that chip away at power in almost imperceptible ways" (Rubin 1996 cited in Hollander & Einwohner, 2004: 451). However it has been suggested that "any definition of resistance should retain the 'everyday strategies' used by individuals or social groups. To dismiss these everyday strategies ignores the attitudes and behaviour expressed by many people in their everyday lives" (Coleman & McCahill, 2011:146). Yet there is still little to be found about what attitudes and behaviours *are* being expressed, or what meaning or reasoning can be found in such examples. Marx notes eleven types of resistance, admirably demonstrating the range of oppositional behaviour, but claims that "In spite of the obvious moral difference [it is possible to] treat these two generic types as behaviorally equivalent" (2003:374). Whilst the behavioural outcome may be

similar, I would argue that motivation is important whether your aim is understanding, rallying, or controlling those exhibiting that behaviour.

But what are we to make of the central role of technology in these responses? What is it about technology that makes it liable to adaptive responses that are apparently devoid of grand ideological justifications? What are we, further, to make of the evidence of the popularity of some technological interventions – demand for more CCTV, more speed enforcement, acceptance of some airport security innovations? What do we learn by looking at technologies that seek to influence those that are not traditionally conceptualised as criminal?

Case studies in self-interested resistance

It would be impossible, in one contribution, to cover all law enforcement technologies, to consider all the arguments for and against their use, the evidence of effectiveness, or the evidence of public support or opposition. Indeed much has been done on this elsewhere (see for example McGuire, 2012; Kearon, 2013). What this paper can do is consider evidence of public resistance to a few key example technologies, setting some ostensibly similar technologies against one another to account for differences in reaction. It proposes that, in the case of technological interventions, it is worth considering 'the public' as comprised of offenders and potential offenders, victims and potential victims, rather than 'the public' as somehow dichotomous with 'offenders'. As such, the new and unsettling encounters between previously 'law-abiding' citizens (Wells, 2012) and control technologies will be explored. As will become apparent, one of the key reasons put forward for resistance that does not draw on privacy narratives is that of the appropriate focus for surveillance and control (versus the inappropriate). The distinction between the 'us' and 'them' of much criminology (and even more criminal justice policy) is itself offered as a reason for resistance, rather than adopted as an organising narrative. That this reason for resistance exists does not undermine previous claims for the lack of an ideological basis for action – rather it emphases the individual, self-interested nature of the responses.

Two case studies are focused upon, below, with a final section devoted to suggesting other examples that might prove fruitful for further study, using the framework provided here. As I have argued elsewhere, "[i]t may be possible to draw a distinction between resistance to surveillance predicated upon social concerns, and resistance to surveillance predicated upon individual costs and harms." (Wells & Wills, 2009: 273). This paper rounds up some of the 'costs and harms'-based forms of resistance that characterise aspects of the opposition to law enforcement technology. It uses these to attempt to explain the mixed enthusiasm that the public appears to show for a range of ostensibly similar law enforcement technologies as well as the evidence of resistance to some technologies.

The paper first engages with what is considered to be one of the more accepted techno-fixes – CCTV. The second case study considers the example of speed cameras (and to a lesser extent their ostensibly similar technology of ANPR cameras). This second example allows us to explore resistance that has been both heavily publicised and which features those that might traditionally have been thought to form the groundswell of potential crime victims who are the audience

for positive claims about the usefulness of technology. The final section considers a range of other technological interventions that have met with a range of responses. The focus is on the kinds of resistance that eschew grand oppositional narratives in favour of a range of often rationally motivated responses to the limited capabilities of crime control technologies.

CCTV

Of all the technologies associated in some way with the prevention and/or detection of crime, CCTV stands out as one of the most widespread and, it might be suggested, accepted. In most discussions on this topic, the focus is on the exponential rise in coverage (see the collection edited by Doyle, Lippert & Lyon, 2012), debates about its effectiveness (for example Gill & Spriggs, 2005; or Coleman & Norris, 2013 for a comprehensive introduction) or levels of public support (for example Ditton, 1998; or Dawson, 2012 for a recent international overview). In many cases this is presented alongside discussions drawing on the surveillance studies tradition, where concerns about privacy and a 'Big Brother' narrative are often articulated (though increasingly academic contributions do critique their predecessors for over-stating the significance of this narrative; see for example Fyfe & Bannister, 1996; Waiton, 2010). It has been suggested that these concerns seem to evidence an academic preoccupation, with some failing to locate, and noting their failure to locate, widespread public anxiety about CCTV as a general law enforcement and deterrence tool (Gilliom, 2006; Loader, Goold & Thumala, 2013). This section begins by briefly proposing a number of reasons for the absence of widespread public concern, which can be juxtaposed with later, more controversial, technological interventions. It also notes and theorises suggestions made recently about possible limits to the public's appetite for image capture in the name of security production, whilst suggesting that those subject to CCTV's gaze may be viewed as operating in 'resistant' forms which are entirely to be expected given the framing discussions of the previous section.

This is not the place to go into arguments about the effectiveness of CCTV (indeed many have done this already) but for these purposes it seems safe to conclude that CCTV has not unequivocally demonstrated any 'magic bullet' status that could be offered as a simple explanation for its popularity. Indeed the effectiveness of CCTV is, it has been shown, dependent on time, place and the crime being focussed upon (See for example Gill & Spriggs on the relative contribution of CCTV to car parks versus town centres (2005))

Whilst it is complicated to attempt to prove a deterrent impact, the idea that the rational offender might 'think twice' has some persuasive power, even if the actual effect is only to relocate that harm to another time or place (Short & Ditton, 1998). As Norris observes, camera surveillance is based on the assumption that "it will influence the decision-making of the 'rational' offender who, on calculating the risks, will choose not to commit the crime under the gaze of the cameras as this will increase the probability of being caught"(2012:34) and this has intuitive appeal, seemingly, for politicians and the public.

The promotion of CCTV as a crime prevention tool for street crime offences primarily (robbery, assault etc.) also serves to reinforce the 'us' and 'them' distinction that supports a traditional view of the law-abiding masses and the minority of deviant 'others'. As will become clear in relation to other (ostensibly similar) technologies, explored below, this contributes to its essentially reassuring presence. With the likely offender conceptualised in traditional and consensual terms, for the majority CCTV can be case as a further policing presence only likely to be utilised in their favour if they become a victim.

However, as Loader et al note, there are limits to the take-for-granted and supported status of CCTV. They identify certain "frontiers" (2013:977) where public acceptance may be caveated or withdrawn. These are considered below, along with other forms of what might be termed resistance from those traditionally constructed as the targets, rather than beneficiaries, of CCTV surveillance.

Resistance to CCTV

It is clear that the broad acceptability of CCTV does not extend – indeed has never extended - to all those that fall within its gaze. Many of the ongoing discussions about the effectiveness of CCTV may actually be viewed as discussions about resistance (more commonly described as 'displacement' in this context), though they have not been classed in the same – almost heroic – category as those that have ideological objections to surveillance. It may be that potential offenders, for example, offend in a different place or time to that which they had originally planned, as a result of the presence of CCTV (Short & Ditton, 1998; Marx, 2003:376), or change their modus operandi, hide their face or disable cameras (Coleman & McCahill, 2011), or offend at night when cameras may be less able to record viable images. Some adaptive behaviour may be adopted by those who have no intention to offend, but who do not want to be followed by camera operators, such as the youths in Taylor, Evans & Faser's (1996) and Coleman & McCahill's (2011) research who avoided congregating in large groups, or being seen with known criminals. In each case, the surveilled subjects are resisting the tool and undermining its impact based on knowledge of how and when it works. They are then processing that information, and information about the expected gains associated with pursuing an existing course of action, in order to arrive at a decision about continuing or adapting that action.

Given the absence of total surveillance coverage, combined with the separation of crime control from its moral foundations as occurs via the use of technology, such responses are predictable to the point of being obvious. In fact, as McQuade (2006) argues, those criminals who do not adapt to circumvent the abilities of new technologies remain more at risk of capture until they adapt – representing that adaptation as a natural and inevitable process. The very principle on which CCTV is supposed to work (its ability to influence the choice to offend or not to offend) undermines its effectiveness when that principle sees rational choosers choose to find other ways to achieve gain, rather than to abstain. It might usefully be looked at as an expected response to technological interventions that make no effort (indeed can make no effort) to challenge or change internal morality.

Despite the evidence that CCTV is broadly accepted, even popular with the 'law-abiding' public envisaged as its beneficiaries, Loader et al suggest that there are developments which may "press up against the limits of banality in ways that risk unsettling security practices whose social value and utility have come to be taken for granted." (2013:977). They note that recent developments such as 'nanny cams' (installed by families to keep watch over those employed to look after their children), cameras in baby-changing facilities, and cameras installed by owners within their own homes (where one might be a guest) did cause "distinct unease" (ibid: 990) amongst their research subjects.

The authors speculate that issues of trust and privacy explain their participants' feelings that 'things had gone too far' and that some situations should remain beyond the camera's (and indeed the camera operator's) gaze. Even here, however, Loader et al's respondents were mixed in their responses, with some seeing no reason to object if, as often heard in this context, those being watched 'were doing nothing wrong'. Interestingly, the increased likelihood of image capture also caused some to express concern about their potentially legal but nonetheless potentially problematic activities. Examples offered, with some degree of vagueness that we perhaps have to fill in for ourselves, included wanting "to creep down [the street] and have a word with someone you shouldn't be having a word with" and "visiting your boyfriend down the street" (ibid: 13). In such contexts, those 'doing nothing wrong' (and hence having nothing to fear) did not correlate comfortably with the vision of the clearly defined criminal from whom CCTV protects the law-abiding. What behaviours should and should not invite a response (of whatever form) and who should be responsible for initiating that response? Seemingly, these questions were less pressing when the target was someone else, doing something that offended us, than they are when our own behaviour comes under scrutiny. Such issues are considered further below.

Technology and the motorist

This section considers one area of activity that is, perhaps more than any other area, seeing increasing use of enforcement by technology (Corbett, 2008a PACTS, 2005). The combination of considerable potential for harm to others, with convenient culprit identifiability (in the form of license plates), makes the road traffic context a particularly attractive hunting ground for technologies that promise both to make roads safer and impact upon traditional criminality.

From a risk perspective, road use is a logical focus for preventative action. Road crashes still account for large numbers of deaths and, whilst they may be caused by behaviour anywhere on a spectrum from deliberate to completely unintentional (via reckless, careless and dangerous in between), road traffic offences are often able to be conceptualised as relatively simple acts, or omissions. This makes them appear peculiarly apt for technological enforcement, whether that is a speed camera or breathalyser (detecting whether a presented action is above or below a set limit demarcating problematic/unproblematic behaviour) or an ANPR (automated number plate recognition) database (where problematic/unproblematic is determined by presence/absence from certain

databases), many road traffic offences are amenable to the kind of strict liability legal construction that renders them particularly 'techno-fixable' - at least in theory (Wells, 2008).

But, as a case study for public resistance to law enforcement technology, roads provide ample examples, not least in the form of speed cameras (the main focus of what follows). Historically, enforcement of the road traffic law has always been contentious (Emsley, 1993), given that it thrusts groups of people who traditionally conceptualise themselves as recipients of policing services (rather than of police attention) into unsolicited, negative outcome encounters with law enforcers (Wells, 2008; Corbett, 2008a, b). Technology is centrally implicated in this because it is technology that allows for many road traffic laws to be enforced in large numbers, problematizing behaviours that, historically, would not have been enforced due to lack of manpower (despite being illegal). As such, and as a result of the combing of risk logic with technology, what were once largely dormant laws are now very real in their consequences for many people who may previously have been able to maintain the idea that they were law-abiding. In many cases it is speed cameras and ANPR systems that characterise these encounters, watching over the road network with a view to the identification of motor vehicles being used in an illegal manner, and potentially leading to the offending individual being traced and punished.

Over 12 million prosecutions for speeding have been made possible by speed cameras over the past 10 years in the UK alone (Povey et al, 2011: 63) while it has been claimed that the introduction of ANPR by UK police forces claims has resulted in a tenfold increase in the number of arrests attributed to officers using it. In the latter case, offences detected have included both vehicle-related document offences (having no tax, MOT, insurance, etc.) as well as theft of motor vehicles, drug offences, immigration offences and the capture of people on arrest warrants (Home Office, 2004, 2006, 2007). Enduring and, at times, heated discussions about the status of speed cameras as a legitimate road safety intervention have accompanied their use and taken place in various realms during the last decade (Wells, 2011). From government, to the editor's desk to the dinner table, everyone, it seems, has a view on the use of speed cameras and on the ways in which they should be financed, operated and deployed. The response to ANPR has been, seemingly, more restrained and the technology has enjoyed more widespread acceptance. Whilst the potential for deploying Big Brother narratives seems considerable, Corbett's (2008a: 8) observation that issues such as the sale of data resulting from the use of ANPR cameras are 'clearly a matter of serious concern' and that 'justifiable fears remain' (ibid: 10) seem to characterize the (limited) academic debate about this technology more so than they do the public debate. Seemingly ANPR enjoys the status of 'like CCTV' more than it endures the status of 'like speed cameras' despite focusing on motorists and their deviant behaviours.

As such, the two technologies provide a useful comparison for exploring the reasons why some technologies generate more resistance than others. Firstly, the acts of resistance detectable in relation to speed cameras are considered, before the reasons for them are unpicked. These reasons are then considered alongside

the ANPR example to begin to formulate some explanations for differential reactions to law enforcement technologies.

Resistance to speed cameras

Whilst most drivers would not, presumably, advocate the firebombing or other vandalism of speed cameras perpetrated by such characters as Captain Gatso (UK) and the Tuff Tuff club (Netherlands) as well as numerous offenders acting independently (Wells & Wills, 2009), evidence suggests that most drivers engage in daily acts of resistance to the technology. Research suggests that between 79% (Stradling et al, 2003) and 99% (Corbett, 2003:111) of drivers admit to speeding on occasion, suggesting that the law is not one that enjoys great levels of respect. Corbett has proposed a typology of responses to speed cameras, only one of which is compliant with the spirit of the law. Whilst drivers who obeyed speed limits generally (and regardless of speed cameras) were deemed 'compliers', others were variously labelled 'the deterred' (put off speeding by speed cameras, but presumably not likely to continue to comply if the threat of detection was removed), 'manipulators' (who slowed down for speed cameras and sped up afterwards) and 'defiers' (who continued to speed regardless) (Corbett, 2000). Blincoe et al explored the application of these typologies in 2006 (in the UK) and found that only a third identified as conformers, (presumably) appreciating the validity of the law as applied to speed limits. A further third were active 'manipulators' who conformed to the law only where it was necessary to evade detection (2005: 373).

Clearly, there are many forms of response to the limited functionality of the speed camera, each of which presumably appears rational to their users. Some do adapt to comply (at least at camera locations), but many rationally adopt other behaviours, many of which may be deemed resistance and almost totally undermine the technology. What this suggests is that the reason for the law (the relationship between the act of exceeding the speed limit and the suggested harmful outcome) is not accepted uncritically or universally by drivers.

The speed camera context presents a number of characteristics that make such resistant responses more likely. The behaviour itself is mala prohibita (rather than mala in se) and relies on the convincing communication of the risk-based rationale underpinning it for its legitimacy. The demonopolisation of expertise characteristic of the 'risk society' (Beck, 1992) produces a range of 'expert' voices who can provide alternative rationales for enforcement (ones that situate the driver in the role of victim of unjust state practices, rather than as culpable offender for example) (Wells, 2011). This means that there is ample opportunity for neutralising the inconvenient state logic that has suddenly recast the ordinary driver as an offender. If no risk is presumed to result from driving too fast, but instead positive outcomes are observed (for example, getting there quicker), then the speed camera becomes just another obstacle to be avoided, or negotiated around. More than this, in fact, the speed camera becomes another source of risk for the responsibilised neo-liberal citizen to seek protection from – protection for their driving licence (and perhaps, via this, their employment), their no claims bonus and even their law-abiding identity itself (Wells, 2007). For some drivers, who do not want to rely on their own ability to spot cameras and slow down in

time, their responsibilised self-defensive action may take the form of buying other technologies – this time technologies of resistance – such as a speed camera detector (for jurisdictions that do not publicise the location of cameras to give drivers a fighting chance), a radar jammer (still useful for inhibiting 'sneaky' mobile enforcement), a radar-resistant number plate coating, or the less high-tech application of a layer of mud (to hide the car's identity and thus render its driver immune from being held to account). These actions are, to the driving offender with a livelihood, identity, or both, to protect, logical actions, particularly if the individual has previously been able to dismiss the law which they are breaking as unjustified, unfair, or illegitimate and hence to neutralise any moral concerns associated with the action.

There are further (non-technological) options for the responsibilised 'law-abiding' road traffic offender – for example guides to identifying loopholes in laws (that make prosecutions invalid), or points swapping (where a relative or paid stranger takes the point to preserve a clean licence for the offender, or to prevent them from receiving a ban). These are the practical steps that can be taken once the initial rationalising has taken place. For those for whom the reasoning behind the technology is not sufficiently well proven, or for whom the possibility of causing the associated harm appears remote, the technology becomes simply an impediment to free and easy driving, to be negotiated like any other obstacle. Like a can of de-icer that prevents ice from stopping you in your tracks. Ice is not moralised, it can be vanquished without personal hand-wringing, the de-icer used without the need for moral reflection. It is simply a tool that allows its user to achieve a desired goal.

Whilst the criminal justice system may be increasingly seeing its subjects as dividuals (Deleuze, 1995) - as bundles of risk factors, as triggering or not triggering an intervention based on some decontextualized action, as predictable calculating beings - those subjects may not see themselves in the same way. As such, identities such as 'law-abiding', 'responsible', 'respectable' etc. remain important to individuals who, as rational actors, may be as likely to adopt strategies to resist their unpleasant dividualisation, as they are to comply with what the technology intended in the first place. These identities are complex and multi-faceted whilst the technology recognizes only isolated indicators of worth.

Indeed there are many reasons why resistance to the technology, and therefore to the labels it seeks to attach, is not only appealing but necessary to the responsibilised citizen. If an individual's 'protective cocoon' relies on the construction and defence of a coherent 'narrative of self-identity' (Giddens, 1991), intensified efforts to problematize and punish speeding may challenge the individual's ability to maintain a coherent and consistent sense of who they are.

Research suggests that a key element of the respectable identity claimed by some drivers was the notion of 'being law-abiding' (Wells, 2012: 106). Here, individuals are choosing a commitment to acting in a legal fashion as a defining characteristic of their identity. As a result, they presumably intend and expect that their lives will proceed free from censure and criminalisation. However, the use of risk as a justifying logic for intervention means that a stated intention to obey the law is no protection from criminal problematisation. Rather than laws 'provid[ing] the

necessary architecture in which people can plan and carry out good-faith social cooperation' (Luban, 2002: 296) a risk-prevention logic means that behaviour can be rendered punishable regardless of whether or not it was intentional. Follow this up with the use of strict liability laws and self-defined 'law-abiding' individuals who never intended to break laws can nonetheless find themselves being punished as law-breakers. Either that, or they can adopt resistant behaviours which leave their identities intact.

'Respectability' can also include a commitment to morality (Wells, 2012: 108). Drivers who conceptualised themselves in these terms saw themselves as moral citizens who made moral choices and, as such, they assumed that their stance insulated them from accusations of immorality. However, the increasing regulation of road use based around risk premises has also seen its increasing moralisation. Actions alleged to result in risk are re-conceptualised as *bad* rather than unfortunate, so that where we once had road 'accidents' (the result of bad luck and unhappy chance), road 'crashes' are increasingly fault-based events, determined by criminal law. Lea notes that 'criminalization' should be seen as more than 'simply a tactic for dealing with groups of individuals who constitute obstructions' (Lea, 2002: 139). The police (the identifiable authority behind speed limit enforcement) carry with them an 'aura', or symbolic meaning, which renders the issues they encounter moralised (Loader and Mulcahy, 2003: 33). The moralisation of traffic offending within a strict liability framework means that drivers can feel they are being morally judged for offences which did not in themselves represent bad moral choices. Given that offending can be unintended *and* result from an intention to act morally, a moral stance is no longer sufficient to insulate a driver from moral criticism, nor from criminalisation. A gadget, however, such as a speed camera detector, can offer just that sort of protection from troubling implications.

Adopting a 'risk' approach, and developing technology that enables mass enforcement, has resulted in previously 'moral', 'law-abiding' populations being drawn in to the systems of law enforcement. Such identities, which used to be sufficient to deflect or resist responsibility for criminal acts, offer no such protection from a concern to reduce risk. That acts of resistance are the result, and that these include simply subverting the abilities of the camera to apply the 'criminal' label, should be no surprise. Resistance removes the need to engage in wholesale re-evaluations of who one is, or would like to be. In doing so, it also displaces the original enforcement rationale, and undermines the effectives of the technology. Just because a risk-based narrative means that a behaviour is fair-game, and that technology means it can realistically be enforced, does not mean that those who suddenly find themselves on the receiving end of it will accept its implications. De-responsibilisation – the resistance of responsibility – is perhaps to be expected in such circumstances.

The case of the speed camera therefore demonstrates the dangers of doing what *can* be done when the target population does not subscribe to the reasons *why* it is being done. Without the underlying commitment to the logic of speed limits, the speed camera simply becomes (at best) an obstacle to swift travel, or (at worst) a form of state-sponsored victimization. Many forms of resistance to this particular technology – such as the very basic response of slowing down for cameras before speeding up again - may be unthinking, unarticulated acts of resistance; simple

noncompliant responses to a technology that is fallible and that enforces a law that does not resonate with (or in some cases actively threatens) those subject to it. They are, therefore, rational attempts at responsibilised self-defence behaviour. The aggressor just happens to be the state, rather than the more traditional offender that the state wishes victims to take precautions against. Indeed many drivers evidence support for speed cameras when used to detect the dangerous, inconsiderate, excessive or just plain annoying behaviour of *other* drivers that they experience as threatening (Wells, 2007; Blincoe et al, 2006), only objecting when their own activities are 'threatened'.

But what of other roads-based enforcement technologies? Can the same logics and theorisation be applied there? What about Automatic Number Plate Recognition technologies and their associated software? Can the same forms of resistance be identified in this case, and if not, how can that be explained?

ANPR

ANPR was, in the UK context at least, deliberately marketed as being 'not speed cameras' (Wells, 2012:182-4) with its ability to detect 'real' criminals (of the sort that we can reassuringly identify ourselves in opposition to) promoted. Its ability to detect the uninsured, untaxed, unlicensed motorist, as well as the drug dealer, the illegal immigrant, or even the terrorist can be seen as deliberate attempts to reassure the majority of motorists that this technology was for their benefit, not to be construed as a source of harm and therefore as a focus for resistance or neutralisation. The focus is thus on legitimate criminal targets (intentional, culpable, and not the sort of thing 'we' might get involved in accidentally), leading to the arrest of 'real criminals' whose traffic offending is a risk factor for other criminal activity. By 'denying criminals the use of the roads' (ACPO, 2005) those roads are, by implication, made safer for the rest of 'us'. These 'real' crimes are also, comfortingly, those that place us in the position of potential victim and so reaffirm the state's role as protector of us from them, and the police's focus on other people for our benefit. Clearly, the technology itself is also harder to resist in terms of practical driving actions (fake number plates would be one option, but their use is impossible to quantify), but the technology has certainly failed to produce the levels of anxiety generated by speed cameras, despite being focused on road users in the same way.

Though, by contrast to the speed camera context, there has been relatively little public opinion research carried out in relation to ANPR, the public concerns that are apparent include more expected concerns about the use or abuse of surveillance cameras and the information generated, utilizing more familiar civil liberties and 'Big Brother' narratives (Haines & Wells, 2012). As such, ANPR only raises concerns, it seems, when its focus on its 'proper objects' (Fiske, 1993: 235) is neglected and it suggests the potential for exposing the rest of us to harm through not being used enough (Haines & Wells, 2012).

Such ideas are also in evidence in objections to the use of 'spy' cameras on the school run (Daily Mail, 2013), or to enforce parking (Telegraph, 2014) and bus lane restrictions (Daily Mail, 2014). Kearon notes a story in which a camera system

developed ‘to catch terrorists’ is then wrongly used is used to spy on a ‘middle class family’. He observes that the technology’s use in this way is deemed unfair, but that “this rarely translates into a fully formed critique of surveillance per se. In these examples of public responses to perceived misuse of surveillance technologies, we see a significant tension emerging between support for the appropriate use of surveillance technologies and concerns that the wrong members of society have become the subjects of the surveillant gaze” (Kearon, 2013:423).

The increasing use of dashboard cameras, whilst pointed at other road users rather than the authorities, may be similarly theorised: roads are dangerous places where others may seek to cause you risk. These may be bad drivers, reckless pedestrians, or ‘crash for cash’ perpetrators. The dashboard camera serves as a permanent record of what happened ‘out there’ should anyone come into contact with you in a way that threatens to cause you physical, financial, or reputational harm. It is surveillance directed outward – technology employed in self-defence. To the rationally thinking, ontologically insecure, traditional recipient of police protection, not police power, the purchase of a mini-CCTV camera and the speed camera detector –sitting side by side on the dashboard – may appear entirely compatible and logical purchases. The fact that one defends them from ‘others’ whilst the other defends them from the state is, perhaps, irrelevant, when laws become detached from their moral underpinnings such that they are simply another risk to be negotiated by the responsibilised neo-liberal citizen.

It is clear that, for many, the idea of a simple dichotomy of ‘criminals’ and ‘law-abiding people’ persists despite the fact that, increasingly, risk-based enforcement questions the relevance of an inherent difference between those deemed problematic by surveillance systems and those that may indeed have nothing to fear from them. ANPR reinforces, rather than undermines, this distinction, through its association with ‘real’ crime both on and off the roads. As in the speed camera context, surveillance technologies seemingly generate less concern so long as they remain focused on the activities of the traditionally problematized (Wells & Wills, 2009). It is at this point that the individual (rather than dividual) nature of the implicated offender again becomes important. If the neo-liberal citizen does (with encouragement) see themselves primarily as a responsibilised victim, at risk of harm from a variety of ‘others’ then their perception of the technology as being aimed at them - or at others on their behalf - is crucial.

Airports and others

The following section briefly considers a range of other law enforcement technologies from the same perspective on resistance to those fuller case studies explored above, again using the framework of the reconceptualization of offending and offender proposed at the outset. Electronic tagging, alcohol monitors, airport security, plagiarism detection and illegal downloading offer further testing ground for the ideas set out above.

Loader et al have noted that airport security is “an uneasy mix of the taken-for-granted (passport checks, luggage inspection systems) and the novel and contested (biometric passports, iris scanners, controls on liquids, full-body scanners).” (2013:

979). Certainly airports have a particular ability to thrust strangers together into potentially lethal situations that are characterised by fear rather than trust. Whilst we may be in no doubt of the immorality of the crimes that security measures are trying to prevent, the normative status of those measures themselves may be less clear and less well articulated (Woolgar & Neyland, 2013:224-5). In this case, many objections (to full-body scanners for example) are on privacy grounds, but that sense of privacy is not a universal entitlement. Again it shows evidence of self-interest. Asking "Why should I have to do that when I know I am not a terrorist?" sits alongside an anxiety about the abilities of the technology to detect dangerous substances concealed by others (who potentially are). Measures to restrict liquids on flights (following the security scare of August 2006) are further evidence of the parallel concerns of air passengers mapped by Woolgar & Neyland (2013). Alongside irritation at the need to dispense with drinks 'ground side', and attempts to circumvent the restrictions, the researchers noted the striking reaction of passengers 'air side' when shown a bottle ("brandished" by another passenger) which had demonstrably escaped detection. Security measures may be inconvenient when they imply our own risky attributes, but may be deemed essential when they apply to the risks attributed to the unknown (and therefore potentially dangerous) other – much as we advocate the punishment of other speeding drivers, whilst 'knowing' that we can drive safely at speed ourselves.

From the 'real crime' world we can observe the adaptations of the street drug dealer or the sex offender who, when confined to home by an electronic tag, may easily translate their offline activities into online versions, circumvent the technology and continue to offend. They may alternatively find a way to attach the monitoring technology to their dog (NAPO, 2012), to cut it off (BBC, 2012), to attach it to a false leg (BBC, 2011) or to test the technology to determine its limitations (Telegraph, 2013).The internal morality of the offender has not been changed by the wearing of the tag, so if a technology can be fooled (or indeed if it is withdrawn at the end of the sentence), it will be. There is no inner change to defend against that. Rather than opportunities for circumventing the technology, such responses by 'real criminals' are viewed as dangerous shortcomings of the technology and reason for them to be improved, or for their wearers to be imprisoned instead – for the safety of the law abiding majority of their potential victims.

As Marx has noted, there are various ways around devices that measure blood or breath for proscribed substances, and proscribed levels of substances (2003: n.p.). Alcohol measuring devices in cars and, no doubt, on the person can be fooled. The person who gets their child to blow into such a device to allow them to continue driving, for example, has, rather obviously, missed the point of the device, but the device (or at least its proponents) have also missed the point about the presumed rationality of the target. Rationality may go beyond the anticipated, hoped-for weighing up of pro and cons leading to the selection of law-abiding actions, to include rational ways of continuing to engage in problematic behaviour. The technology cannot alter underlying beliefs, whilst the criminal justice enterprise itself has shied away from this transformative ambition in recent decades.

In his 2004 article, Haggerty drew attention to the use of "computerized informational kiosks" in place of parole officers in New York (2004: 223). He

observes that "[s]uch technologies assist in transforming what was originally envisioned as a 'helping' profession into an agency engaging in routine forms of technological surveillance, with individual officers taking it on trust that their monitoring tools accurately depict the physical location (and occasionally the sobriety) of their virtual charges." (ibid). Whilst technology presents an opportunity for the state to simplify its engagement with offenders, this also allows offenders to simplify their relationship with the state. The need not address their offending issues, they need only meet the requirements of the machine.

Whilst the adaptations of the drink driver, paroled or tagged offender are drawn from the 'real crime' corner, other examples help to suggest that this ability to ignore or overlook the offence-prevention aims of technology has more widespread significance. Justifications for illegal downloading of music and films show similar characteristics, with some of those involved utilising techniques of neutralisation (Sykes & Matza, 1957) and others not seeing the need to justify their behaviour at all (Ulsperger, et al, 2010). Explanations include an unknown or faceless victim for whom the harm appears negligible, the availability of a loophole (perhaps for only a short while until it is closed), the viewing of the downloading as 'borrowing' or helping with promoting the product, and the widespread nature of the offence. Little has seemingly been achieved in terms of communicating the immorality of this kind of theft, with most offenders anxious to see themselves as different from the shoplifters with which they are often compared (Wingrove, Korpas, & Weisz, 2011). If the satellite television company provides a pin number that allows their services to be viewed by the bill payer at a variety of locations, what harm is there in sharing that pin number with one, two, three or a hundred 'friends'? At what point does the 'exploitation' of the capacities and limitations of the technology become a pejorative term?

The introduction of plagiarism-detection software in many higher education establishments was met with almost immediate concerns about (and examples of) how this could be circumvented. Emphasis on the capacities of the tool, rather than the reasons for its introduction, would be ill-advised if the wider crime-control context is anything to go by. But it is not only students that see, and exploit, the limitations of the technologies designed to assess their work. In 2014 *The Washington Post* carried an article about the discovery of a peer reviewing scandal at an academic journal. In this example, a writer had taken advantage of the limitations of an online, email-based, largely-automated peer review system to review their own papers and approve them for publication (Washington Post, 2014). When simple substitute measures such as 'outputs' replace more meaningful ones such as 'quality', and when there is sufficient contempt for those measurements as reflections of true value, then such responses are as likely as any other kind of adaptive offending behaviour. The reward can be achieved in a simpler way with the use of a few avoidance strategies and an appreciation of the limits of the tool being used to make the judgement.

Conclusions

By looking at crime-control technologies as either facilitators of, or obstacles to, our freedom to act as we wish, we may come some way towards answering the question of why some techno-fixes get welcomed and demanded, whilst others inspire resistance. Where technology shows limitations (as it inevitably does), the lack of an effectively communicated and justified enforcement rationale, means that law enforcement technologies are ripe for exploitation, adaptive techniques, resistance and avoidance. The moral message is not sufficiently strong as to provide an effective cushion to insulate where their technological capabilities fall short.

Whilst it may appear odd to locate the adaptation strategies of street criminals who want to avoid capture by CCTV alongside the activities of drivers in response to speed cameras, this is a potentially fruitful task. Whilst one may be seen as adaptation and the other resistance, it really only seems to be the fact that the latter are 'different' to your 'average' offender that makes us see one as strategic and the other as potentially ideological. In the end both are people not wanting to be stopped from doing something they find advantageous, and finding ways around the limited capacities of technological law enforcement. In each case, the moral reasons for complying with the technology are neutralised or simply not considered.

Whilst law enforcement technologies are intended to motivate the potential offender to choose a law-abiding path, and the potential victim of crime to take extra steps to prevent their victimisation, it is perhaps inevitable that, on accepting the logic of their own responsibility, those individuals also take steps to protect themselves from state attempts to restrict their behaviour. Without a strong moral message being communicated by law enforcement technologies, perhaps these interventions become simply another potential threat – an obstacle to be avoided/managed/evaded. Resistance, then, simply becomes evidence of responsibilised rational choice actors making rational decisions which allow them to continue to behave in ways that have been previously deemed advantageous. Given that identities are increasingly constructed partly through purchasing of goods (Haggerty, 2004: 217), why wouldn't some of those goods be deresponsibilising (allowing responsibility to be resisted) as well as responsibilising? (Wells, 2007). If a tool exists to protect you from prosecution (from 'victimisation by the state'), why wouldn't the responsibilised neo-liberal citizen consider purchasing it just as they would consider purchasing a tool that protected them from more traditionally-conceived victimisation?

The findings of these case studies suggest that the self-interested resistance emerges more easily in the current political climate, alongside a persistent acceptance of control where it applies to the 'other'. Resistance to technology (or indeed to surveillance more generally) should not, therefore, be encouraged uncritically, nor viewed as necessarily a positive or empowering activity. For many, increased exposure to technological control is not opposed on the grounds that it is intrusive or contrary to any notion of human rights or social justice.

Felson has argued that, although offenders should always be expected to adapt, this "should not discourage crime prevention, but rather…encourage more foresight among those seeking to prevent crime. We must expect that offenders will try to overcome defences by their intended victims, while devising defences of their own against counterattacks." (2006: 148). The complicating factor in the kinds of regulatory use of technology looked at here is that, increasingly, and for reasons detailed above, it is not always clear who is victim and who is offender, and whether official versions of this dichotomy tally with those of the public on the receiving end of technological interventions. Felson's claim that "[i]f we know how offenders adapt, perhaps we can help the rest of society keep pace" (ibid: 147) perpetuates the common but problematic assumption that people are one thing or the other, not that an increase in regulation, a de-emphasising of a normative basis for the law, a focus (instead) on risk, and an encouragement to responsibilise means that that line is blurred. Rather than view 'the rest' as trying to outwit offenders, perhaps we need to realise that 'they' too are increasingly likely and able to adapt when that blurred line places their own behaviours under scrutiny. Regardless of one's position on crime control, risk, neo-liberalism, power or any other framing approach, it seems unwise to meander into a situation where the only thing stopping people from behaving as they wish (harmful to others, themselves, or to no-one), is the ability and availability of law enforcement technologies that can stop them.

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