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The Opportunity Approach to Compliance

*Benjamin van Rooij and Adam D. Fine**

Abstract: The opportunity approach to compliance focuses on understanding how rule-breaking behaviour takes place and then tries to reduce the factors that enable rule breaking. This chapter reviews two core criminological theories within the opportunity approach: routine activity theory and situational crime prevention. The chapter assesses empirical evidence as to whether policies based on these theories can reduce rule-violating behaviour. Moreover, it discusses the extent to which the opportunity approach can result in displacement and adaptation effects. And, finally, it explores potential downsides to the opportunity approach such as victim blaming and reductions in autonomy and freedom of choice.

35.1 INTRODUCTION

In 2006, British authorities averted a massive terrorist plot aimed at exploding ten passenger airliners. The London-based plotters had developed a new approach to blowing up planes that involved smuggling liquid explosives hidden in soft-drink bottles. In the aftermath of what became known as the ‘liquid bomb plot’, airport security rules changed and began preventing passengers from bringing large amounts of liquids aboard planes. The new rules seek to prevent terrorism by disabling the behaviour in the first place.¹

Changing the airport security rules in the wake of the liquid bomb plot demonstrates a very different approach to compliance and to using legal rules to deal with harmful, rule-violating behaviour. Rather than use incentives to try to sway people’s motivation and make them act better, we can make it harder – or even impossible – to misbehave in the first place. We call this the ‘opportunity approach’ to compliance, as it seeks to enhance compliance by reducing the opportunities for non-compliant conduct.

This chapter discusses such approaches as they have developed in criminology. It focuses in particular on routine activity theory and on situational crime prevention. Although not discussed here, similar ideas have also developed in behavioural ethics, finding that situational conditions shape people’s ethicality and ethical behaviour (Feldman 2018; Feldman and Kaplan 2018). For the purpose of this handbook, the current chapter gives an overview of

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* This chapter is based on a chapter in a forthcoming popular science book about law and behaviour. The chapter draws directly on key analysis and writing about the relevant literature discussed there but has altered the text to fit the handbook format.

¹ See www.nytimes.com/2006/08/28/world/europe/28plot.html and www.independent.co.uk/travel/news-and-advice/liquids-ban-on-flights-10th-anniversary-do-we-still-need-it-a7181216.html and http://news.bbc.co.uk/2/hi/uk_news/8242479.stm.

the leading ideas in both these theories, presents some of the key insights and studies, covers some of the empirical evidence about their effectiveness and ends by examining some of the potential downsides of an opportunity approach to compliance.

35.2 ROUTINE ACTIVITIES, LIFESTYLES, VICTIMIZATION AND CRIME

In the 1960s, the American economy was booming and people's lives improved. There was more employment, more people graduated from high school, there were higher wages, and standards of living improved. Typically, when these things happen, people tend to think that crime rates will decrease. In fact, the state of empirical evidence about this is not clear-cut (Zimring 2006; Benson and Zimmerman 2010; Rocque, Saunoris and Marshall 2019; but see Kelly 2000 on the strong relationship between inequality and crime). In fact, during this period, as the economic circumstances improved, crime rates went up. For instance, between 1960 and 1975, burglary rose by 200 percent.

Two criminologists, Lawrence Cohen and Marcus Felson (1979), utilized two sources of data to examine how these two trends coincided. First, they examined crime statistics, including victimization data (age, gender, occupation, marital status), crime locations (home or elsewhere) and victim-offender relations (close or strangers). Second, they analyzed how people's lives and their everyday practices changed in this period. Their analysis covered a range of data, including women's employment and education statistics, vacation period data and consumer data (including the value and weight of products). By combining these sets of data, they unearthed patterns that linked the crime data to the data about people's everyday practices that could help explain why crime rose as the economy boomed.

Cohen and Felson (1979:598) found that in the period they studied, more women went to school and work. At the same time, the number of single households increased by 34 per cent. People also received and took more holidays (with a rise of 81 per cent between 1967 and 1972 alone). The result was that more American houses were empty, especially during the morning.

Moreover, the actual goods themselves in the houses had also fundamentally changed. Consumer electronics became smaller and lighter. The lightest TV in 1960 weighed 38 pounds, yet by 1970, this had reduced by more than 50 per cent to only 15 pounds (Cohen and Felson 1979:599). The result of the weight loss was that houses had products that had more value per pound. In 1975, for instance, a car tape player was worth \$30 per pound, and a record player cartridge was valued at \$5,000 per pound (Cohen and Felson 1979:596). And with the growth of the economy, Americans bought more of these lightweight and valuable products.

Cohen and Felson's conclusion was that these two trends explained the increase in theft. As women went out to work and study, and Americans took more holiday time, more houses were left unattended and unprotected. And with the drop in the weight of consumer electronics and the increased expendable income that people had to buy such goods, these unguarded homes had more valuable goods that had become easier to carry (Cohen and Felson 1979:596).

Cohen and Felson analysed these trends beyond theft and burglary to also explain crime trends more generally. They used a large-scale data set with crime rates (for homicide, rape, aggravated assault, robbery and burglary). They used statistical analysis to test whether the types of crime were related to what they theoretically considered to be daily activities deemed to cause a risk of victimization. They found a robust relationship between crime rates and daily activities, with certain daily activities leading to higher crime rates.

On the basis of this research, Cohen and Felson developed what they called 'routine activity theory'. This theory holds that people's daily activities – where they live, with whom they live, what they buy, whether they work, whether they take holidays – affect crime. And not just property crime but also violent crime, including rape and murder (Cohen and Felson 1979).

35.2.1 *The Core Theory and Its Expansion*

Cohen and Felson (1979) came to see three core elements that played a role in how routine activities led to crime. First, there has to be a **motivated offender**, someone willing to commit the criminal activity. Second, there has to be a **valuable target** that attracts the offender. Examples include lightweight valuable goods such as smaller-sized radios and new colour TVs, and the tiny but extremely expensive diamond turntable needles. Finally, there should be **no capable guardian present**. For burglaries in the 1960s, that would be homeowners who were away more often and also just lived alone more often, which left their valuables in their houses unguarded.

These three core elements are brought together by a fourth aspect that gave rise to the theory's name, the routine activities that influence the encounters between the offenders and the targets (Groff 2007). When routine activities change, as they did, for instance, when women went to work, the interactions between targets and offenders can change and affect crime rates. And as such, as Groff (2007:99) has summarized, 'if the frequency with which these elements converge in space and time increases, crime will also increase, even if the supply of offenders or targets remains constant within a city'. Scholars have further expanded Cohen and Felson's original ideas and also started to include people's lifestyle choices (for instance whether they use alcohol or drugs), incorporating the so-called 'lifestyle exposure theory' (Hindelang, Gottfredson and Garofalo 1978), as additional crime victimization risk factors (McNeeley 2015).

An important line of research has looked not just at the routine activities of the victim but also at those of the offender. Osgood et al. (1996) make a vital contribution here in showing that individuals who spend more time performing unstructured activities with peers and in the absence of authority figures are more likely to engage in illegal and deviant behaviour. Here they find that such unstructured routine activities give them more time for deviant behaviour (Osgood et al. 1996).

Another line of research springing from the original theory has looked at how routine activities can explain the geographical distribution of crime. An influential study published in 1989 by Sherman, Gartin and Buerger developed a database of crime locations based on the spatial distribution of calls made to the police, analysing 323,979 calls made from all 115,000 addresses and intersections in Minneapolis over a period of one year. It finds a clear non-random distribution of crimes at a very small number of places, so-called 'hot spots'. The results, the authors argue, support the basic premise of routine activity theory that suitable targets, motivated offenders and available guardians play a major role in crime patterns. However, its core conclusion is that we must not merely focus on these actors but also on the places where they converge and thus on the criminogenic nature of places, which may stimulate crime through their capacity to generate or host crime (Sherman, Gartin and Buerger 1989). We shall look in more depth at this when discussing situational crime prevention in the next section.

35.2.2 *Applications of the Theory across Forms of Deviance*

Routine activity theory has become a key field in criminology. The theory has been found to explain a range of illegal behaviours. Several studies, for instance, have looked at how routine activities can predict sexual crimes. An earlier paper by Joanne Belknap (1987) used data from the US National Crime Survey to obtain data about rape and attempted rape. She identified 762 cases of women and girls who had reported having been victims of rape or attempted rape in the ten-year period the study covered and compared them with a random sample of 2,532 women and girls who had not reported the same crimes in the same survey. To test the predictive value of routine activity theory, the study drew on a number of variables also reported in the same survey, including the time of day, the season and the place where the attack occurred, race, age, marital status, lifestyle activities and family income. The study found that most of the variables associated with routine activity theory, such as the time of day and the season of the attack, were indeed of influence in the rape and attempted rape cases. The study found that marital status, age and family income were the strongest predictors of victimization of sexual violence (Belknap 1987).

A different line of study has shown that routine activity theory applies not just to people's activities in the physical world but also to online activities and cybercrime (e.g. Holt and Bossler 2008; Bossler and Holt 2009; Pratt, Holtfreter and Reisig 2010). One study has looked at how routine activity theory can predict online fraud. Using survey data from a sample of adults in Florida ($n = 922$), the study sought to understand how their routine online activities (such as the amount of time they spent online and online shopping) as well as several demographics were related to online fraud victimization (Pratt, Holtfreter and Reisig 2010). The study found that when controlling for key demographics (including age, education, race, marital status, retirement and home ownership), the core predictors for online fraud victimization were hours spent online and online purchases, with more online activities and shopping leading to people experiencing more fraud (Pratt, Holtfreter and Reisig 2010:282). Another study has looked at the risk of becoming a victim of cyberbullying (Mesch 2009). This study, using survey data from a representative US youth population ($n = 935$), looked at how both adolescent online activities and their parents' role in mediating their activities affect the risk of becoming a victim of cyberbullying. The study found that the risk of victimization was higher for young people who were active on social networking platforms and who participated in chat rooms. However, they did not find a higher risk for children who played more online video games. The study found further that parents have only a limited influence here and that most attempts to mediate behaviour do not protect against cyberbullying. Only parents who restricted the websites their children visited were found to decrease cyberbullying victimization (Mesch 2009:391).

Where most studies of routine activity theory use either data sets of lifestyle patterns and crime rates or victimization surveys, some criminologists have sought to further explore the theory through using computer-aided simulated modelling techniques. One study by Elizabeth Groff (2007), for instance, used such an approach to look at whether the rate of street robbery is related to the amount of time people spend away from home. Her study sought to understand whether the theory that predicts that more time away from home will increase street robbery also holds true in different types of setting and of temporal and spatial pattern where people's activities take place. She tried to assess whether there are differences among people whose activities outside of their home are completely random in terms of time and space, whether they are guided according to a time schedule but geographically random,

or whether they perform activities at set times and in set spaces. Using a software package called Agent Analyst and ArcGIS, Groff sought to test her hypothesis in simulated models, applying them to the land use and street network of Seattle, Washington. She ran five experiments in these models that each changed the routine activities of potential targets when away from home, while also changing the spatial and temporal constraints of people's activities outside of their homes. The study found a significant increase in the risk of robbery for people in more constrained temporal and spatial patterns. In simpler terms, the more routine the outside activities were, the more chance that targets might meet offenders and get robbed. However, when people's outside activities did not follow clear spatial patterns and when they moved randomly, routine activity theory did not predict a risk of robbery (Groff 2007). This study shows how work in routine activity theory has developed to consider highly particular patterns at play while also employing computer-simulated modelling.

Routine activity theory has also been applied to white-collar crime and forms of organizational misconduct. This is especially important for the present handbook as it shows that this line of thinking is not restricted to ordinary crime or individual behaviour and may be a key form of analysis for major corporate compliance issues. One study, for instance, explored how routine activities could play a role in medical fraud (Benson, Madensen and Eck 2009). Using insights from Cohen and Felson's (1979) original study, the paper focuses on what in a white-collar crime setting would constitute a common place where targets and committed offenders could meet. The study uses the case of hospitals overcharging patients' insurance companies for medical services, a common form of medical fraud. Here the hospital is the committed offender, the insurance company the victim and the system for submitting insurance claims is the common place where the two meet. What enhances the risk of fraud here is not so much the meeting of offender and target, as they are bound to meet at the source of any claim made; rather, it is the level of guardianship that exists in the claims process. The key form of guardianship here, the article argues, could exist through a claims reviewer at the insurance company, a whistle-blower protection system at the hospital, or an accreditation commission that oversees the hospital's claims process and conducts audits (Benson, Madensen and Eck 2009). Although the paper does not systematically study these issues, it shows the relevance of routine activity theory in analyzing fraud.

And as a last application of routine activity theory, again with a focus on corporate misconduct, a recent study by (Gibbs, Cassidy and Rivers III 2013) used the theory to analyze fraud within the European Emissions Trading System, the world's largest market for trading carbon emissions. It analysed the system for fraud opportunities looking at whether it allows for a convergence of offenders and targets without capable guardianship. They analysed the structure of the carbon market and how trading in it occurs. They also looked at how the market is regulated and how monitoring and enforcement against fraudulent practices have been set up. Through this analysis they mapped the opportunities in this system for entities that want to engage in fraudulent trade, showing where there are attractive targets and whether these are sufficiently guarded. In addition, they analysed cases of fraudulent practice in these markets to see whether such opportunities were at play in reality. Their conclusion was that routine activity theory could be applied here and that it can also account for rule breaking in legitimate business environments (Gibbs, Cassidy and Rivers III 2013). This last study is thus a major example of how routine activities can also play a role in corporate compliance problems and also of how they can be applied through combining legal analysis, interviews and case studies of fraudulent practices to uncover major weaknesses in existing economic and regulatory systems that enable fraud.

35.2.3 *An Overall Review of the Available Studies*

These diverse bodies of work thus show the application of the theory. A deep dive into the many studies about routine activity theory, which this chapter cannot do, would show the nuance where the theory applies and what its limitations are for different forms of crime, different types of activity and various lifestyles. What we can offer here is an overall picture of what we know based on existing studies through two reviews we have, one from 2009 and one from 2015. The first literature review is by Richard Spano and Joshua Freilich (2009: 305), who reviewed twenty-two studies published between 1995 and 2005 to assess 'the empirical validity and conceptualization of routine activity theory by reviewing individual-level multivariate studies'. They first assessed whether the four key elements in the routine activity and lifestyles theory are at play as risk or protective factors for criminal victimization. They found clear support for the theory that

[t]he results show a clear pattern of support that is consistent with hypothesized effects for all four key concepts. Multivariate findings for: (1) guardianship are over five times more likely to be protective factors, (2) target attractiveness are 3.33 times more likely to be risk factors, (3) deviant lifestyles are 7.4 times more likely to be risk factors, and (4) exposure to potential offenders are 3.12 times more likely to be risk factors (Spano and Freilich 2009:308).

The review further looked at whether there was variation in the overall findings for different types of samples (including national, college students or high poverty, and different age groups), types of outcome variable (victimization versus crime/deviance), type of data collection (cross-sectional versus longitudinal) and geographical location (USA versus other). For each of these, it assessed whether the overall findings varied for different types of study. Overall it found that none of the variation in the study designs yielded results that were inconsistent with the original theory, but it did find that the theory was more robust in certain samples, including adolescents, college students and American samples (Spano and Freilich 2009:309).

The latest large-scale review we have of routine activity theory is from 2015. This review, by McNeeley (2015), looks at the overall theoretical development of the theory and its incorporation of lifestyle choices with the original Cohen and Felson routine activities. It reviews forty-seven studies published between 1986 and 2012. Unlike Spano and Freilich's (2009) earlier review, this later study is not a meta-analysis or even a systematic review but rather a discussion of the selected studies in light of individual victimization, individual offending, and the link between crime and place. It finds, overall, that the theory

has been useful in explaining macro-level crime rates, individual-level victimization and offending, and the concentration of crime at micro-level places. Lifestyle routine activities theory [as the study calls it] is also especially beneficial in that it can be used to explain multiple types of crime, including property, personal, white-collar and online crimes. The empirical evidence testing the theory's applicability to multiple types of crime is generally supportive (McNeeley 2015:40).

Routine activity theory has thus produced a clear framework for analyzing and addressing illegal behaviour and compliance challenges. It shows that to reduce rule-breaking behaviour, an analysis should be made as to whether valuable (desirable) targets are guarded well enough from potential (motivated) offenders. Based on such analysis, the approach can be used either to improve guardianship or to reduce access to valuable targets. As such, this approach to compliance does not focus on understanding *why* people break rules and

commit crime, or really on reducing the number of motivated offenders. Instead, it focuses on *how* crimes are committed in order to understand what key enabling factors are at play in order to eliminate these. Routine activity theory is all about reducing crime by taking away opportunities for bad behaviour. Routine activity theory focuses on the convergence of targets and offenders in the absence of capable guardians; its implications centre either on trying to get potential victims to better protect themselves or on enhancing guardianship of these targets. There are highly valuable applications here. People can learn that certain activities, such as walking in dark, deserted neighbourhoods or shopping online at websites they do not know, can come with greater risk. If people are offered more information about what such risks are, they can protect themselves and prevent crime. The same applies to guardianship in cases where self-protection is not possible or desirable. A good example is how our computers have ever better firewalls and anti-virus software as most people do not have the skills to protect themselves. But as Sherman, Gartin and Buerger (1989) have shown in their discussion on hot spots for crime, the focus on targets and guardians misses a broader analysis of how particular situations can give rise to deviant and criminal behaviour beyond what an analysis of routine activity theory would find.

35.3 SITUATIONAL PREVENTION

Soon after Cohen and Felson developed routine activity theory, a second closely related theory developed, so-called 'situational crime prevention theory'. This idea was developed by Ronald Clarke. He developed his original ideas together with Pat Mayhew in a study about the effects of a law in West Germany that required motorcyclists to wear helmets. This law, which was adopted in 1976, had an unexpected and important by-effect. Between 1976 and 1982, the law that required people to wear motorcycle helmets when riding surprisingly caused a reduction in motorcycle thefts. Clarke, Mayhew and colleagues found that the more strictly the law was enforced, the less theft there was. They found that the pattern held up even when they controlled for trends in demographics with a decline in theft-prone juveniles in the same period. They even found that although motorcycle thefts declined in this period, overall theft increased (Mayhew, Clarke and Elliott 1989). They found similar crime drops following helmet mandates in the Netherlands (a reduction of 36 percent) and the UK (a drop of 24 percent in London). Their analysis concluded that the helmet mandate had made it harder to steal a motorbike. In the past, once a thief had unlocked the motorcycle, they could just ride off and no one would know they had stolen the bike; they looked just like any other motorcycle rider. But after the helmet mandate was instituted, jacking a motorcycle and riding off bare-headed would attract police attention. So, unless thieves made the effort to bring their own helmet, stealing a motorcycle became harder.

Ronald Clarke drew on these motorcycle studies to develop a new approach to addressing crime. He called his approach 'situational crime prevention'. He argued that reducing crime involved more than addressing the offender (Clarke 1980). Instead, Clarke argued that what matters is the situation that enables illegal behaviour before it occurs. According to Clarke, it is much simpler and easier to manipulate the opportunities for offending than it is to change the actual offender (Clarke 1980).

Just like routine activity theory has argued, rule-breaking behaviour depends on opportunity. Clarke's approach is broader than that of routine activity theory, as he looks beyond reducing the attractiveness of targets and target hardening, where crime is prevented by

ensuring that potential victims are better protected or learn to better protect themselves. Instead, he focuses on the broader set of situations that enable rule breaking.

35.3.1 *Changing the Physical Environment*

There are several other key examples where situations could change crime. One example Clarke mentions is street lights. When urban centres developed better street lighting, crime levels went down (Clarke 1980). In fact, a recent systematic review of eight American and five British studies about the effects of street lights on crime levels confirms this: improved street lights reduced crime on average by 20 percent (Farrington and Welsh 2002).

The same idea has been applied to reduce public urination in Amsterdam, where researchers experimented with how shining bright lights could help to reduce public urination at the Royal Palace in Amsterdam. Robert Dur and Ben Vollaard spent seven months analysing video footage of public urination, examining how urination patterns were affected by lights they installed at the Palace. Their study showed that light had a strong effect, cutting public urination by half.²

Another study similarly found that the location of where people park their cars affects car thefts and damages to cars. The study found that parking in a public car park makes theft nearly four times more likely than parking in the street outside one's home, more than ten times more likely than in one's driveway and over 200 times more likely than parking inside one's home garage (Clarke and Mayhew 1998).

Another line of research, which actually pre-dates both situational crime prevention theory and routine activity theory, uses the same line of thinking about how the physical environment can cause crime. It moves us further away from routine activities and more towards understanding the place where such activities occur. Similarly to the idea of criminogenic spaces that Sherman, Gartin and Buerger (1989) discussed in their study of crime hot spots, this approach looks at how architecture and urban planning relate to crime. Here Oscar Newman's (1972) work on the 'defensible space' has been most influential. He did an extensive study about crime patterns and disorder in different urban centres in the United States. Based on this, he found that architecture and urban planning affect crime: for instance, the development of high-rise buildings had stimulated crime, and the height and architecture of buildings affected crime. Higher buildings had less of what Newman calls 'defensible space'. In low-rises, residents could more easily defend and control their own spaces. In low-rise buildings there was a clearer demarcation of what space belonged to the community in the building and what they could thus claim and for which they had responsibility to ensure its safety. Newman also focused on physical aspects in the built environment that could enable or undermine opportunities for surveillance. High-rises simply offered many spaces that obstructed surveillance by blocking the view to the street and by having enclosed lobbies, elevators and stairways (Newman 1972).

Another example of how the physical environment can affect rule-breaking or rule-compliant behaviour is obvious to all and does not really require much study. It is also how we design our roads. The clearest examples here are speed bumps. If these obstacles are well designed, most cars simply cannot drive faster than the speed limit.

² www.erasmusmagazine.nl/2016/12/22/het-is-heel-moeilijk-om-wildplassers-op-heterdaad-te-betrappen/.

35.3.2 *Reducing Access to Dangerous Items*

Situational crime prevention is more than just changing the physical environment. It has many different approaches. There are many applications of the idea that harmful or rule-breaking behaviour can be reduced by limiting access to enabling items. Think of restrictions on the sale of spray paint to prevent graffiti, or restricting access to guns and ammunition to reduce homicide and suicide. And as a 2010 report in the UK argued, a good way to reduce harm in bar fights is by giving customers polycarbonate instead of glass beer glasses so they can no longer break the bottles and use the glass shards as weapons (Design Council 2010).

35.3.3 *Strategies and Interventions of Situational Crime Prevention*

Over the years, Clarke and his co-authors have categorized situational crime prevention strategies across five overall strategies: (i) increase the effort that offenders must make to do harm and break rules; (ii) increase the situational risks of performing unwanted and illegal behaviour; (iii) reduce the situational rewards of unwanted behaviour; (iv) reduce situational provocations that may cause stress, temptation, peer pressure or imitation; and (v) remove situational excuses. Situational crime prevention has developed these five overall approaches into twenty-five types of intervention that all share a pragmatic view of how unwanted and criminal behaviour occurs in order to see what elements can be addressed to eliminate people's opportunity to engage in such behaviour.

To understand the importance of this approach, we do not need to look at academic studies. We can find examples all around us. In shops, the tags on merchandise will trigger alarms when a thief takes items without paying upon exiting the store, or, worse, labels may stain stolen items with non-washable ink, and reduce the value of stolen goods. CCTV cameras on the streets should make many types of criminal activity easier to detect. Authorities regularly clean graffiti to deny spray-painting youths the pleasure of displaying their art, and if that fails, they use graffiti-resistant paint. Car alarms and removable radios reduce car theft and damages. And criminal finance is disrupted by eradicating high-value bank notes like the 1,000-USD bill (which was taken out of circulation by President Nixon in 1969) and the 500-euro bill (which is no longer issued since April 2019). One million euros in 500-euro bills only weighs 2.2 kilograms (just under 5 lb) and can easily fit in a suitcase.³

35.4 WILL REDUCING OPPORTUNITIES SIMPLY DISPLACE WRONGDOING?

One of the core critiques of the opportunity approach to illegal behaviour is that it may displace crime and misconduct. Also, despite one opportunity being closed off, committed offenders may adapt their strategies and find other opportunities. And reducing opportunities for some may create opportunities for others. In other words, a potential downside of the opportunity approach is that it may result in displacement, adaptation or replacement.

Let us look at displacement first. Several studies have sought to measure empirically whether the opportunity approach results in a displacement effect, where closing off opportunities in one area increases crime in others. Guerette and Bowers (2009) recently published a review of the available work, covering 102 studies. In 26 per cent of the cases reviewed, they found some type of displacement effect. However, overall, they concluded that crime

³ www.scmp.com/news/world/europe/article/2183801/death-500-euro-note-bill-favoured-criminals-and-germans.

reduction was greater than crime displacement. In other words, closing off criminal opportunities saves more crime than it displaces (Guerette and Bowers 2009).

Research about gated communities shows an interesting insight into the complexity of the displacement effect. With the extra protection of the gated community, we would assume that there would be more crime outside than inside these communities. The empirical evidence is less clear, however. Blakely and Snyder's (1997) book *Fortress America: Gated Communities in the United States* analyzed crime rates in and outside of American gated communities. The book found no evidence that people living within the gates suffered less crime than those outside (Blakely and Snyder 1997). Interestingly, one study of gated communities in South Africa even found that crime rates were greater inside the gated communities than outside. The explanation was simple: people who live inside gated communities are richer and therefore make more attractive targets. The extra effort and risk involved in getting inside these communities is lower than the higher value these communities present as targets (Breetzke and Cohn 2013).

There is some evidence of the opposite effect of displacement, a 'halo effect' (Scherdin 1986) where closing off opportunities for misconduct works beyond the area where the opportunities have been closed off. Studies of using technology to prevent theft, such as home security systems, CCTV cameras, neighbourhood street lighting improvements and electronic library book tags, appear to show such an effect (Clarke 2005:52). There is less theft in houses without security when they are in a neighbourhood where other houses do have security (Pease 1991). Streets with better lights also reduce crime in adjacent streets with normal lighting (Painter and Farrington 1997). CCTV cameras also reduce car crimes in adjacent car parks where they were not installed (Scherdin 1986). And electronic tags not only reduce book thefts but also result in less theft of untagged library items like video cassettes (Scherdin 1986).

The second problem with the opportunity approach is that it may cause offenders to switch their strategies and find a different opportunity for the same type of crime. A good example where this has been studied is credit card fraud. In the late 1980s, credit card fraud had become a major problem costing hundreds of millions of US dollars each year. To deal with this, companies took several steps to reduce opportunities for the most prevalent forms of fraud, such as false credit card applications, theft of cards in transit from credit card companies to customers, misuse by genuine cardholders, and the recycling and reuse of stolen or lost cards (Levi, Bissell and Richardson 1991:7). Banks created a joint registry for fraud that tracked all people involved in credit card-related fraud schemes. They used the scheme to filter out credit card applications by people involved in previous fraud. To reduce credit card mail theft, they asked customers to pick up their card in person at the bank, or informed them when it would arrive so they would take good care, and banks also started to issue the PIN that customers needed to activate their card via separate mail. While these interventions worked very well at first, that is, between 1991 and 1995, the effects did not last. Since 1995 there has been a rapid increase in credit card fraud, which has doubled compared to the previous record numbers of 1990. What happened is that fraud strategies changed. Fraudsters could make use of new technological opportunities with the advent of the Internet and online sales, which increasingly did not need physical cards. Moreover, they perfected the art of producing complete counterfeit cards (Clarke 2005).

Adaptation can undermine the effectiveness of the opportunity approach. Closing off one opportunity can set a sort of arms race in motion that spurs criminals to find another. By its very nature, this makes the opportunity approach reactive as it is essential to

discover what new approach offenders use and find a way to close it off. This may well leave offenders one step ahead as they adapt, and adapt again.

At worst, this adaptation can come with escalation. The introduction of car security alarms has reduced ordinary car theft, where people break into parked cars and speed away. But, as Clarke explains, these same car alarms may have also led to an increase in carjackings, where car owners are forced to hand over their car at gunpoint (Clarke 2005). Similarly, one study found that the introduction of glass windows between tellers and customers in London post offices led to an increase in the use of firearms in post office robberies (Eklom 1988).

Routine activity theory and situational crime prevention may be effective ways to reduce crime. But they are not foolproof and can at times have negative effects on crime and may displace it or result in a game of cat and mouse as offenders adapt their practices to create new opportunities.

35.5 CONCLUSION

Routine activity theory and situational crime prevention provide a very different approach to compliance. They show that rule-breaking and damaging behaviours can be addressed by reducing opportunities for them. This type of opportunity approach to compliance can be highly effective and also efficient. It does not require the law to shape people's motivations and as such it mostly does not depend on deterrence, social norms, legitimacy or the capacity to comply. Simply making non-compliance harder should mean that compliance itself increases.

Altogether, the opportunity approach to compliance asks a different question to most other approaches. It does not ask why people break the rules; it asks *how* they break them. And based on the answer to that question, it seeks a way to reduce rule breaking by closing off a vital element that enables illegal behaviour. As the chapter has shown, that can include supporting potential targets in better protecting themselves, improving guardianship of such targets, changing the physical or online environment to make it harder practically to reach targets or perform rule-breaking behaviour, and limiting access to items that can cause harm or break rules. The literature has developed a nice range of options that can be used here.

Clearly, the opportunity approach should be a major strategy to ensure compliance. For any problems of non-compliance, one of the first questions should be whether there is a way to make breaking the rules harder. At present, however, the opportunity approach seems to be more prevalent in some areas of compliance and crime strategies than others. We see it clearly, for instance, against terrorism (where authorities learn from each attack or attempt and then close off avenues) and theft.

However, the opportunity approach is used far less frequently – if at all – for a variety of other types of behaviour, including texting while driving. For years, there have been effective techniques and technologies aimed at making cell-phone usage impossible in the driver's seat, yet they are rarely implemented.⁴ To understand why the opportunity approach is not more widely used, we must account for its normative downsides. Apart from potential displacement, adaptation and escalation effects that may undermine such crime prevention efforts, there are also moral and political reasons against it.

The first reason is that the opportunity approach, especially routine activity theory's focus on target hardening, may result in blaming the victim. If studies find that certain types of

⁴ www.nytimes.com/2016/09/25/technology/phone-makers-could-cut-off-drivers-so-why-dont-they.html.

clothing make people more likely to fall victim to sexual assault, should we reduce the number of such assaults by asking potential victims to dress differently? The second reason is that the opportunity approach can result in inequality. Richer people and organizations will be more able to afford the expertise and costs required to protect themselves against crime than people with lower resources. A good example of this is that when in the 1970s the USA mandated that all new cars should have a steering lock to prevent theft, people who could not afford to buy a new car with the new technology became prime targets for auto theft (Clarke 1980). And the third and final reason is that the opportunity approach inherently limits freedom. The very reason why it is so effective, namely, because it takes away the opportunity, is also what makes it politically suspect, namely, it takes away choice and thus freedom. We may all want to reduce the thief's freedom to burgle our house by having a better alarm, but few would support rules that would mandate car manufacturers to install technology that makes it impossible to speed on the highway or to blow into an alcohol breathalyzer before starting the ignition. All these reasons mean that even if there is an effective way to manage compliance through the opportunity approach, it still requires a proper balancing of the different interests involved here.

It is clear that the opportunity approach developed in criminology should become more central in the study and practice of compliance. While there has been some work applying it to white-collar crime, and also some work on the usage of technology in compliance (i.e. Staats et al. 2016), we do not yet have a comprehensive and systematic understanding of the different ways in which routine activity theory and situational crime prevention, as well as adjacent theories in behavioural ethics and ecological criminology, can be applied to compliance more broadly.

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