Littering: The Cinderella of Criminology

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Abstract

Despite its visual and environmental impact, littering has attracted very little criminological attention. Using an extended literature review of the available academic works and survey findings, I will endeavour to examine (a) the legal and practical definitions of litter; (b) the variables of age, gender, class and educational level that may explain littering behaviour; (c) the criminological theories that can elucidate and/or corroborate this data; and, finally (d) the policy deductions and practical solutions that flow from these criminological theories.

My tentative conclusion is that there is a significant effect for age, class and educational levels on littering behaviour, with offenders tending to be from the 'C2DE' demographic. On the theoretical front, radical criminology has been curiously silent on this issue the only viable explanations and solutions currently emanate from the neo-classical, rational choice and right-realist perspectives, particularly 'Broken Windows', Situational Crime Prevention, Routine Activities theory and Social Control/Self Control theories. Thankfully, these theories have provided a robust underpinning for the practical interventions of government and anti-litter campaign groups, and even point the way towards new forms of policing and communal stewardship of the problem.

Introduction

Litter is a blight on the landscape, the seascape and the urban street-scene. Unlike serial killing, paedophile assaults, banker fraud and other headline-grabbing crimes, it is ubiquitous. It affects everyone - not just the rich, not just parents, not just the poor. Yet it is the Cinderella of Criminology; rarely acknowledged and rarely researched. In a recent review of the available literature, Nic Groombridge observes that "...whilst there is a lot of cultural/philosophical/political writing, indeed hand-wringing and exhortation, about litter...there is very little explicitly or self-identified criminological writing [on the subject]" (Groombridge: 2013, p394).

It is time to redress the balance. Indeed, if criminology cannot constructively and persuasively address this supposedly 'minor' (yet all-pervasive) issue, cynics might question whether the discipline is worthy of academic status. Could the cynics be right? Let us try to prove them wrong.

But let us begin at the beginning with a definition of what littering actually is. Indeed, was Cinderella's accidentally discarded glass slipper...'litter'?

Definitions

Cultural theorists may try to persuade him otherwise, but to the proverbial 'Man on the Clapham Omnibus' pondering on the two-and-a-quarter million pieces of litter jettisoned in the UK every day, litter is neither 'art' nor 'poetry' and it never will be. He knows what it is, what it looks like and what it smells like.

Unfortunately, the law itself is not so straightforward. On the subject of littering, it is somewhat ambiguous, if not tautological.

Section 87 of the Environmental Protection Act 1990 provides for an offence of 'littering'. Section 87(1) states "a person is guilty of an offence if he throws down, drops or otherwise deposits any litter in any place to which this section applies and leaves it". But the Act does not provide a specific definition of the word 'litter'. So at face value we are left in definitional circularity: 'littering' is the dropping of 'litter' and 'litter' is what is dropped in 'littering'. Thankfully there is nothing in the Act to suggest that 'litter' is to be given some special or unusual meaning other than that in common parlance (Brutus-v-Cozens: 1973). And there is a concrete, though partial, definition in Section 98(5A); "litter" includes (a) the discarded ends of cigarettes, cigars and like products, and (b) discarded chewing gum and the discarded remains of other products designed for chewing.

A more detailed Governmental view as to what constitutes 'litter' can be found in the Department for Environment Food & Rural Affairs (DEFRA) Code of Practice on Litter and Refuse (April 2006). Part 1, Paragraph 5 acknowledges that the Environmental Protection

Act 1990 does not provide a comprehensive definition of litter, so compensates by providing "as a guide...common definitions used in cleansing contracts".

Paragraph 5.2 states that "Litter is most commonly assumed to include materials, often associated with smoking, eating and drinking, that are improperly discarded and left by members of the public...As a guideline...a single plastic sack of rubbish should usually be considered fly-tipping rather than litter".

Littering is a summary offence, falling under the jurisdiction of the Magistrates' Court. Section 88 of the Environmental Protection Act 1990 makes provision for fixed penalties, the maximum being a Level 4 fine (£2500). A surcharge can be added to that and, possibly, costs.

Yet even though littering is deemed to be a summary offence. Legal opinion is undecided on whether it is a strict liability offence, or whether *mens rea* is required. If it was strict liability, then even accidental depositing of something - like Cinderella's slipper - might constitute an offence. The *actus reus* is throwing down, dropping and leaving. "Throwing down" (Section 87) is certainly a deliberate act. But "dropping or otherwise depositing and leaving it" might be done deliberately, negligently or even accidentally. Strict liability is, of course, an extensive topic covering many pages in the legal textbooks where the application of the law can be ambiguous. Even DEFRA itself seems to be uncertain. In its non-statutory guidance Local Environmental Enforcement – Guidance on the use of Fixed Penalty Notices, issued in 2007, DEFRA states "a fixed penalty notice should only be issued where there is evidence of intent; this is to say that someone clearly meant to drop the litter in the first place". So in DEFRA's opinion - at least in this publication - *mens rea* is required. Thus the jury is still out

on the question of whether Cinderella's accidentally-discarded glass slipper would have constituted 'litter'.

This legal and definitional ambiguity has allowed anomalous verdicts and rulings to emerge. There have been instances where the Section 87(1) definition has been stretched to its very limit. For example, there have been several fixed-penalty cases involving the 'throwing down' of bread whilst feeding pigeons, ducks and seagulls, urinating in the street and spitting in public.

However, most legal commentators would hesitate to endorse these Magistrates' Court decisions. In fact, the courts' rulings that urine and spit constitute litter are seen by many to be perverse decisions. Urine, sputum and faeces all fall under the category of human biological detritus, and they should ideally be dealt with in the same legal manner. But categorising them all as 'litter' would certainly be pushing definitional boundaries well beyond the limits of Clapham Omnibus common sense.

So for the purposes of this essay, and in the absence of any superior definition, I shall adopt DEFRA's quantitative definition of litter as small items of improperly discarded detritus, smaller in volume than a black bin bag. For further elucidation, I include Leeds Council's 2009 description of litter as "paper, chewing gum, cans, bottles, food and drink containers, plastic, left-over food, cigarette ends, etc., although this list is not exhaustive" (Quoted in Groombridge: 2013, p396). As a rule of thumb, this dual definition is certainly workable, and readily recognisable.

Culprits and Context: *Unmasking the 'Litterbug'.*

The number of defendants found guilty in court for littering offences in England and Wales rose from 2,304 in 2007 to 3,573 in 2010 (Source: Hansard - HC Deb, 13 October 2011, c514W). These figures do not include Fixed Penalty Notice fines (FPNs) for littering as suspects only go to court if they refuse to pay. 35,000 littering FPNs were issued in the UK in 2008/09 (this is the latest figure available as DEFRA no longer collects statistics on FPNs).

Unfortunately, centrally held information by the Ministry of Justice on the Court Proceedings Database does not contain details about the circumstances behind each case, let alone the demographic profile of the offenders. So we must look elsewhere for clarification.

When, how and why people litter is clearly influenced by factors such as location, what convenient disposal options are available, the item to be disposed of, and whether people are alone or in groups. For instance, a group of friends might readily leave litter at the Glastonbury Festival, but as individuals they would be unlikely to repeat this behaviour on a public street. Research, conducted largely by campaign groups, does give some guide to the more likely suspects, depending on circumstances and setting. The Victorian Litter Action Alliance neatly summarises Australian research findings as follows:

•   Young people are more likely to litter when they are in a group.

•   Older people are more likely to litter when alone.

•   Men litter more than women.

•   Women use bins more than men.

•   In a group of ten people in a public place, three will litter and seven will do the right

        thing.

- More smokers will litter their cigarette ends rather than use a bin.

- People are more likely to litter in an already littered or unkempt location.

- The most common reasons for littering are "too lazy" (24%), "no ashtray" (23%) or "no bin" (21%).

- Less than one-third of older people who were seen littering admitted their behaviour when questioned.

(Victorian Litter Action Alliance - Accessed 22/11/2014).

Unsurprisingly, littering is often subsumed under the heading *Anti-Social Behaviour.* Indeed, the Home Office explicitly includes 'Litter/Rubbish' in its list of examples of ASB. The British Crime Survey (2011) discovered that it was more probable that adults aged 16 to 24 years were going to be involved in anti-social behaviour (21%) than higher age brackets, with only 3% of those aged 75 years and over being involved (Home Office 2000). Litter, abandoned cars and graffiti consistently top the list of public concerns in the majority of towns and cities (Burney, E: 2009). Another significant concern is 'teenagers hanging around'. Could this point to a causative link between the number of youths who loiter in the streets and the rate of littering?

Academic empirical research into the variables and causation of littering behaviour is rare. However, using non-participant observation, and extrapolating from prior littering studies, Schultz *et al* (2011) were able to examine the disposal behaviour of pedestrians at various public areas and note the characteristics of these individuals and the contextual factors around them.

The results showed, at an individual level, a statistically significant and consistent effect for age, with young adults (18-29) being more inclined to litter than the older generation. The

inverse correlation between age and littering has been recorded in various survey reviews of littering behaviour (Beck, 2007).

Krauss *et al.* (1978) considered the reasoning behind young people being the predominant litterers and explained that normative control needs both cognitive information and internal controls, both of which evolve through the socialisation process.

With regards to *gender* culpability of littering, Schultz *et al* found that although it was a significant predictor of littering in general - males generally littered more than females - there was, strangely, no tangible difference in gender littering rates for cigarette butts (Schultz *et al:* 2011). This secondary finding is in keeping with earlier observational studies showing no significant difference in gender littering rates (Finnie: 1973).

However, the survey undertaken by Torgler and colleagues in 2008 questions some of these earlier findings. Using European Values Survey (EVS) data for 30 Western and Eastern European countries, the researchers attempt to demonstrate a strong empirical link between environmental participation and reduced public littering. At first glance, this would seem to be an almost tautological foregone conclusion; if you are against littering and other environmental degradation, then you will not yourself be a litterbug. But the study does tease out some interesting insights into attitudes to littering using the variables of age, gender, educational level, religious adherence etc.

One of the survey's atypical (virtually counter-intuitive) conclusions is that it is older single males (50-59 years) who are least likely to have a strong environmental conscience. Previous research (Zelezny *et al*: 2000), alongside Torgler *et al*'s study, does indeed indicate that females are more conscious of environmental issues than males, so are less inclined to litter.

Literature regarding social norms evidently signifies that women are more accepting and willing to abide by society's rules (Torgler, 2007). This links in with their findings that it is unmarried men, presumably not having the guidance of the environmentally conscious female, who tend to be more blasé about littering. This is an interesting spin on, and partial corroboration of, the Social Control perspective.

Torgler *et al* also look at *education* as a factor for littering behaviour and state that prior research (Blomquist and Whitehead, 1998; Veisten *et al*., 2004) demonstrates a notable positive impact on willingness to contribute to the quality of the environment by those who have been in extended, formal education. Whether the education was achieved through an informal or formal process is irrelevant; the assumption is that well-informed residents are more mindful of environmental issues and concerns and have stronger environmental attitudes because they are more aware of the possible damage which could be caused (Danielson *et al*., 1995; Torgler *et al*: 2007).

Education naturally leads on to *socio-economic status*. The study reports that the more affluent members of public have a higher demand for an uncluttered environment. Income has also been considered in past empirical literature. Veisten *et al*. (2004) concluded that unemployed citizens frequently exhibit lower preferences for environmental protection schemes. But Torgler, somewhat incongruously, found that unemployed people actually self-report a *high*er level of compliance with anti-littering rules (Torgler *et al*: 2008).

Turning closer to home, *Keep Britain Tidy* has used market segmentation research since 2001 to categorise the population into five specific sections based upon their behaviour and attitudes in order to target the appropriate demographic sectors with anti-litter campaigns.

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This is a radical change from the 1970s approach, which launched anti-litter campaigns and indiscriminately targeted all members of society (Keep Britain Tidy, October 2010).

The five segments of littering behaviour and demographic background are detailed below:

Beautifully Behaved (43% of the population)

Littering behaviour; They discarded apple cores and small bits of paper, but not much else, and quite often refrained from seeing this as a problem.

Background; People in this category would often take pride in their home town and could almost be seen as 'smug' in terms of their seemingly 'perfect' behaviour. They were brought up not to litter and would claim that bad parenting and thoughtlessness was one of the biggest agents of littering. They would be mortified if someone caught them disposing litter in the street and would pick it up immediately if this was the case. Members of this category tended to be females aged 25 and under who were also non-smokers.

Justifier (25% of the population)

Littering behaviour;They would say that 'everyone else is doing it' to justify their behaviour and blamed the deficiency of bins for their littering habit, which predominantly comprised cigarette butts and chewing gum. Dog fouling was another problem, with some members of this group simply refusing to pick it up.

Background; Although justifying their purpose, they would be embarrassed if anyone caught them littering and similar to the 'beautifully behaved' would offer to pick it up. They

perceived people who littered as lazy. Justifiers were predominantly male. They were aged 34 and under and were often smokers.

'Life's Too Short' and 'Am I Bothered' (12% of the population)

Littering behaviour; They both had complete disregard for the impact of littering on the environment. Life's Too Short had more important things to worry about than the consequences of dropping litter, whereas Am I Bothered? were totally unaware of the consequences and, even if they were, did not care.

Background: Neither group would feel guilty if they were caught littering, and would not offer to pick the disposed item up. In some cases, they might even become aggressive. However, if someone dropped litter in front of them, they would consider it rude. Young male smokers were the predominant members of this group.

Guilty (10% of the population)

Littering behaviour; Although they knew littering was 'wrong' and regarded others who littered as inconsiderate and lazy, they felt that carrying it was inconvenient and so went about littering in a clandestine manner i.e. littering when there was no one else around, particularly from the car or at public events. Unsurprisingly, they would feel extremely guilty if caught in the act and would pick the litter up immediately.

Background: As with the *Beautifully Behaved,* the Guilty section was predominantly female, 25 and under, non-smokers.

Blamer (9% of the population)

Littering behaviour: They blamed their littering on the council for their lack of bins. They even blamed fast food agencies and manufacturers for over packaging food and other goods. Members of this group would be embarrassed if caught littering and would pick it up while making excuses for their behaviour. They thought littering in general was inconsiderate, but acknowledged that if there bins weren't provided, or if the bins were overflowing or full then it was perfectly acceptable.

Background: The dominant presence within this group were young, male, smokers.

(Keep Britain Tidy: October 2010)

In 2010 *Keep Wales Tidy* created its own segmentation model of 809 Welsh adults who admitted to littering. The findings largely mirror the results of the *Keep Britain Tidy* study, right down to the verbatim rationalisations used by the participants. There is, however, a more explicit emphasis on the 'C2DE'* demographic, and smokers, as primary culprits (Keep Wales Tidy: November 2010, summarised in Appendix to this essay). *Under the NRS demographic classification, 'C2' refers to skilled manual workers, 'D' to unskilled manual workers and 'E' to casual workers, the unemployed and benefits-recipients.*

Keeping the focus on Wales, in 2009 Professor Martin Innes and colleagues conducted a survey in Cardiff to explore the local public's experiences and perceptions of crime, disorder and policing. We shall re-visit Innes' 'Signal Crimes Perspective' later in this essay. Suffice it to say here that litter ranked as the second highest 'expression code' of public concern, only surpassed by 'groups of youths'. Again, this could indicate a *causative* link between the number of youths visibly congregating on the streets and the rate of littering in the area. We

cannot ignore, either, Innes' findings that in socially-deprived areas of Cardiff such as Grangetown and Plasnewydd, littering was deemed to be a conspicuous and very real problem (Innes *et al*: 2009). This would concur with the Torgler study, which found evidence to suggest that *social class* has an impact on the rate of littering (Torgler *et al*: 2008).

Continuing on this theme of *class,* campaign group surveys have shown that cigarette ends and packets are consistently the most prevalent litter items, followed by confectionery packaging; drink bottles/cans; and fast-food packaging (see, for instance, Barnes: 2010 and Keep Britain Tidy Report: 2013)*.* As smokers' materials feature so prominently in both the definition and actual content of litter, we can look for clues as to the identity of the associated litterers in the demographics of smoking itself. Survey after survey has shown a clear social gradient in smoking; smoking rates are markedly higher among poorer people than among those who are wealthier (Crosier: 2005).

To some extent this is corroborated by the branding of the littered items. The 'Litter Heroes' survey conducted in 2010 found that amongst the discarded cigarette packets surveyed, lower-priced brands predominated. A similar tendency was observed with the branding of discarded beer and lager cans and bottles. (Barnes: 2010)

As an aside, the increasing popularity of electronic cigarettes will undoubtedly have an ameliorative impact on this form of littering in due course. According to ASH, the use of electronic cigarettes among adults has tripled in Britain from an estimated 700,000 users in 2012 to 2.1 million in 2014. One can only speculate at the reduction in smoking-related litter this switch-over has already achieved. However, early indications are that it will take some considerable time for vaping to oust cigarettes as the smoking currency of teenagers and young adults in the C2DE social grouping (Doward: 2014).

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The class correlation we have inferred with regard to smokers' litter is admittedly not so clear-cut in respect of the other predominant litter types. However, fast-food packaging does give us pause for thought. Fast-food is often portrayed as a cheaper (or only) alternative to healthy food amongst poorer families. So it is not inconceivable that this group are significant culprits with regard to discarded fast-food packaging. This would appear to be supported by the findings of the 2010 *Keep Wales Tidy* Report, which highlighted the prominence of the C2DE social groupings in heavy littering.

Yes, much of the evidence is largely circumstantial. But there is plenty of it (Innes *et al:* 2009; Torgler *et al*: 2008; Veisten *et al:* 2004). There is at the very least a *prima facie* case for postulating a general pyramidal 'shape of littering', namely that there is an inverse correlation between class and the propensity for littering.

The context in which littering takes place is also important, and there have been a number of studies of littering behaviour in public areas. For instance, Cialdini *et al.* (1991) report a higher likelihood of littering in areas where litter is already present compared to cleaner areas. This implies that if certain individuals are aware of other people littering, their tendency to litter escalates, reducing the moral constraints which normally would compel individuals to act in a socially acceptable manner. Previous research (Finnie, 1973; Heberlein, 1971) has also concluded that clean areas stay clean. Hence, an individual's perception of the behaviour of other citizens is likely to influence their own behaviour. Krauss *et al*. (1976) summarise this phenomenon as: *"…any norm violation that is observed tends to weaken the norm by detracting from its social validity".* As we shall see in the next section, this finds a tangible resonance in 'Broken Windows' and 'Control' theories.

Criminological Perspectives

According to campaign-group surveys the reasons why people drop litter are manifold and varied. They include sheer indolence, ignorance of the law, no sense of ownership or pride for the locality, insufficient or poorly-sited litter bins, absence of visible and consistent enforcement, an already highly-littered environment, group pressure to litter "like the rest of the lads" and even rebellion against society through the flaunting of a wilful *jemenfoutisme*.

A number of these motivations and contexts have echoes of familiarity within criminology itself. But not all criminological theories are equal when it comes to tackling the problem of littering head-on. Doubtlessly, Subcultural and Cultural criminologists can capture the *jemenfoutiste* bravado, the momentary thrills and kicks, the status-enhancement within the gang hierarchy, and even the perverted 'glamour' of littering. But such perspectives tend to rely on over-romanticised subjective descriptions at the expense of objective analysis and practical policy deductions. Even Groombridge, in his quest for a distinctive 'green solution' to littering observes ruefully that "...litter is seen by the...left as a minimal issue used by moral entrepreneurs to criminalise the already marginalised...within criminology, litter is seen as archetypically a 'right realist' concern." (Groombridge: 2013 pp 398-399).

Groombridge is quite correct. Radical criminologists, whether left idealist, feminist or even mainstream Green, have focused their attention almost exclusively on the environmental degradation wrought by organised criminals (preferably of the white-collar genre), large corporations and governments. Indeed, the radical logic of new deviancy/labelling theories

might lead the unsuspecting reader to conclude that the humble litterbug is in fact an existential adventurer seeking to carve out an authentic identity in the shadows of the oppressive state apparatus. Even the Left Realist School seems to have reservations about slotting littering into its celebrated 'square of crime'. Perhaps this is because there are no immediately-identifiable victims, or perhaps it is a more generalised distaste for stigmatising the C2DE demographic. This distaste may be ideologically understandable, even emotionally understandable, but it is not necessarily good criminology.

Unfortunately, Groombridge's own search for a non-stigmatising Green perspective on litter is a triumph of hope over substance. There is talk of reclaiming the streets under the inclusive banner of citizenship. There is a fleeting reference to 'radical', 'peace' or 'guerrilla' gardening, as exemplified by the community garden experiments in San Francisco, New York and London. And there is a pious hope that the (as-yet-undefined), "green solution to litter would not be to cleanse the streets, but to breathe life into them." (Groombridge: 2013, p405).

It is hardly surprising, therefore, those anti-litter campaigners, property management companies and many, otherwise radical, environmentalists have been obliged to base their programmes and campaign literature on theories located at the conservative/neo-classical end of the criminological spectrum. These theories also, of course, underpin many of the attitudes and strategies of the police and other enforcement agencies.

Conservative criminology recommends a return to classical basics. There are three recurring assumptions:

1. A distrust of generalised theories of crime causation, and a rejection of utopian panaceas based on protracted (and cost-ineffective) offender rehabilitation and/or root-and-branch socio-economic restructuring.

2. A view, primarily at least, of man as a rational agent, whose actions are the outcome of free choices and decisions made to maximise rewards and minimise effort and/or pain…in short, Bentham's Hedonic Calculus or its modern embodiment, cost/benefit analysis.

3. With some variations of emphasis, conservative criminology rejects the neo-positivist conception of human nature as a social or cultural construct. Instead, it shares Durkheim's view of man as *homo duplex*: a dual-natured being that is capable of criminal acts as well as law-abiding conformity.

These themes are clearly apparent in the writings of James Q Wilson who, along with George Kelling, launched the 'Broken Windows' theory in 1982 (Wilson & Kelling:1982, pp29-38). Despite its many critics on the Left, 'Broken Windows' is perhaps the most recurrent theoretical underpinning of anti-litter campaign literature...far more so than liberal, radical, and even other conservative ideas. Ironically, the term 'litter' only appears once in the original 1982 article, and the following oft-quoted extract does not actually appear in the article itself. It nevertheless provides a neat introduction to the theory:

"Consider a building with a few broken windows. If the windows are not repaired, the tendency is for vandals to break a few more windows. Eventually, they may even break into the building, and if it's unoccupied, perhaps become squatters or light fires inside. Or consider a pavement. Some litter accumulates. Soon, more litter accumulates. Eventually,

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people even start leaving bags of refuse from take-out restaurants there, or even break into cars." (Quoted in, for example, Barajas: 2014).

Wilson and Kelling highlight the linkage between 'disorder' (low-level criminality and incivility such as littering, vandalism, graffiti, aggressive begging etc) and more serious crime. Disorder is not seen as a direct cause of serious crime. Rather, the 'broken window' is a symbol or signal of unaccountability. Potential criminals take cues from their surroundings and configure their behaviour accordingly. If an urban area is litter-free and its buildings are well-maintained, people will be less likely to litter or vandalise there, because they will sense that they will be held accountable if they do so. The theory maintains that minor crimes will progressively increase concern and fear in local residents - and that when the fear causes the residents to retreat, a sense of neglect will pervade the area, which then allows more serious crime to infiltrate because of the decline of informal social control.

Police have a key function in disrupting this process. If they focus on disorder and minor crime in neighbourhoods that haven't yet been overtaken by more serious crime, they can help reduce fear and resident withdrawal. Promoting greater informal social control will help residents themselves protect their neighbourhood and prevent serious crime from permeating.

William Bratton, as New York Police Commissioner, translated the 'broken window' diagnosis into a vigorous policing strategy. If order fosters accountability and disorder enables crime, then enforcing the smallest laws could prevent the larger ones from being broken. Bratton had zero tolerance for graffiti and turnstile-jumping. He also cracked down on so-called 'squeegee men' (Bratton: 1998). In the 1990s there was a 51% decrease in violent crime and overall homicide dropped 72 % in New York City. At the time, these

impressive results virtually gave both the broken windows theory and the policies it inspired the status of a self-evident truth.

Critics of 'broken windows' have subsequently pointed out that as the economy strengthened and unemployment dropped in New York, so did violent crime. Surely these factors have equal importance as that of the disappearance of squeegee guys? Other researchers discovered that rather than disorder *causing* crime, disorder and crime actually co-exist and are caused by the same economic and social factors (Kircher: 2004).

Despite these criticisms, the 'broken windows' theory has not been conclusively discredited. Far from it. The idea that 'litter begets litter' through the environmental signals of apathy and unaccountability surely accounts for several of the verbatim rationalisations offered by culprits in the *Keep Britain Tidy* and *Keep Wales Tidy* reports we referred to in the previous section. It would also explain why, for instance, the hypothetical group of friends at the Glastonbury Festival might readily leave litter at an already litter-inundated site, but would not do so in a litter-free and well-maintained public street. Indeed, for every empirical study that attempts to refute the theory, there is another that supports it. For instance, Kees Keizer and colleagues from the University of Groningen conducted a series of controlled experiments in 2007/2008 to decipher whether the effect of existent disorders (such as litter or graffiti) increased the occurrence of additional offences such as theft, further littering, or other forms of antisocial behaviour.

Keizer's initial study was conducted in an alleyway frequently used to park bicycles. In the first scenario, the walls of the alley were freshly painted; in the second scenario, they were covered with roughly-scrawled graffiti. Keizer found that 69% of the riders littered in the alley containing graffiti compared with 33% when the walls were clean.

However, the most significant result showed a doubling in the number of people who were prepared to steal in a scenario of disorder. In this experiment, an envelope containing a €5 note (clearly visible through the address window) was left sticking out of a post box. In a clean, ordered environment, 13% of those passing took the envelope (instead of leaving it or pushing it into the box) compared with 27% who took the envelope from the post box covered in graffiti.

The researchers conclude that one example of disorder, like graffiti or littering, can in fact encourage another, such as stealing. This does not necessarily imply that people will automatically imitate the bad behaviour they observe around them. But it can certainly foster the violation of other behavioural norms. The message for policymakers and police officers is that clearing up graffiti or littering promptly could help fight the spread of crime (Keizer *et al:* 2008 - See also: Anon, 20 Nov 2008).

For Bratton, the remedy was zero tolerance. But an alternative, and possibly more constructive, response to the 'broken windows' diagnosis has been developed in the UK by Professor Martin Innes and colleagues under the title **'Signal Crime Perspective'**. The aim was to narrow the 'reassurance gap' i.e. the paradoxical situation in which the public's 'fear of crime' (as measured by the British Crime Survey/Crime Survey for England and Wales) does not change in tandem with the overall crime rate. Innes argues that fear of crime and people's risk perceptions - the perceived likelihood of being victimised - are linked to certain 'signal' crimes or events.

Litter is one of these signal events. In a 2009 study, Innes and colleagues identified ten 'broken windows'-style hotspots in Cardiff. In three of them, litter was identified as the top problem:

"Overall litter is also a powerful proxy signal that is associated in the minds of residents with social decline, increased sense of threat, anger and fear. It is therefore suggested that if assertive and effective measures were taken to address the litter problem, this would have a significant impact on the perception of insecurity across the city." (Innes *et al:* 2009, p110).

In a report published in 2010, Innes and Weston expand on this 'broken windows' theme, and link it up, quite naturally, to the 'Big Society', a communitarian concept and ideal now shared - in spirit if not name - by the three major UK political parties:

"Research has demonstrated that untreated ASB [Anti-Social Behaviour] acts like a magnet for other problems. Therefore, dealing effectively and quickly with incidents when they present may act to suppress other problems. Managing ASB can create a space in which communities can mobilise and improve their capacity to resolve problems through informal social control and their own collective efficacy, rather than being dependent upon the police." (Innes & Weston: 2010, p44).

Innes and Weston hope that this marriage of 'Broken Windows' and 'Big Society' will ultimately give birth to a genuinely community-based 'Reassurance Policing'. We shall re-visit this theme later in the essay.

Practicality and applicability are qualities also shared by the various 'Rational Choice' theories often subsumed (sometimes with a note of disparagement) under the umbrella title

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' Administrative Criminology'. These theories share the neo-classical view of man as a rational agent and *homo duplex*, but the emphasis is on rationality rather than inherent criminality. In the writings of Rational Choice theorists like Ron Clarke, unlike many on the hard right, the temptation to focus on tougher policing and tougher punishment is largely resisted (Clarke:1980). Clarke is not primarily concerned with the capture, punishment, cure or even moral culpability of offenders. The aim of his so-called **'Situational Crime Prevention'** is simply to make criminal action less attractive to potential offenders, and/or to increase the chances of offenders being caught.

Examples of Situational Crime Prevention in practice are too numerous to list comprehensively here (for a full survey, see for example: Clarke:1997). They range from fitting good quality locks and alarms to reduce rates of domestic burglary to the extension of CCTV coverage, and passenger and baggage screening at airports. They also draw upon early US studies in Environmental Criminology such as "Crime Prevention through Environmental Design" by C R Jeffery (1971) and the "Defensible Space" theory of the architect Oscar Newman (1972). Clarke readily acknowledges Newman's arguments about the criminogenic potential of large inhuman tower blocks and housing estates. Newman had shown that through relatively minor changes - window alterations and improved lighting; clear boundary demarcations and regulatory signage; and the vigorous removal of litter and graffiti - communal 'natural surveillance' was enhanced, and so too was a sense of territorial ownership. Consequently, residents felt more secure and proprietary about their building, and became extended eyes and ears in reporting and discouraging unwanted behaviour. Crime rates, and littering rates, declined accordingly.

Many of the practical solutions we shall examine later in this essay can be seen as the positive offspring of Situational Crime Prevention, whether it be the introduction of more

and better-sited/designed litter bins (ironically Situational Crime Prevention would also have supported the removal of these bins in the wake of UK terrorist threats!) or the highly-successful introduction of carrier bag charges in Ireland and parts of the UK. It is also worth noting that one of the most common criticisms levelled against the theory (that increased surveillance and/or target hardening merely *displaces* the criminality to less protected locations) hardly applies to littering. Since the primary benefit to casual litterers is avoiding the inconvenience of carrying the litter and/or the effort of locating and walking to a bin, they are hardly going to tramp across town to find a less secure area to dump their rubbish! The displacement effect is more likely to hold true for motivated fly-tipping...a different legal and criminological beast altogether.

Routine Activities Theory developed by Lawrence Cohen and Marcus Felson (1979) shares the same rational choice underpinnings, and can be seen as a development of, and complement to, Situational Crime Prevention. The central idea is that daily routines and everyday activities create the convergence in time and space of the three elements necessary for a crime to occur; motivated offenders, suitable targets or victims, and the absence of 'guardians' capable of preventing (or at least reporting) the crime. Capable Guardianship can take the form of a person who is able to act in a protective manner; or mechanical devices such as CCTV surveillance or security systems. Human capable guardians include the police and the general public. But they also include, perhaps more importantly, routine staff such as bus conductors, resident caretakers, apartment block doormen, shop assistants, football club stewards, car park attendants, and even post and milk deliverers.

With regard to littering, it is of course difficult to identify a specific 'victim', unless one points to abstractions like society-at-large or mother earth. Alternatively, one might identify the target as an unprotected area of the street or countryside. But that does not detract from

the applicability of the theory. Capable guardianship is obviously a crucial deterrent against littering. And by highlighting the importance of changes in life-styles and the physical environment, Routine Activities Theory allows us to tease out some interesting insights into the littering problem. The reduction in the number of police foot patrols in favour of patrol cars and the greater use of private cars, which tend to insulate us from our environment. The increasing popularity of 4x4s, whose armoured safety only serves to intensify the occupants' sense of insulation and isolation. The proliferation of drive-in fast food restaurants that do not require us to risk even the few steps between car and restaurant, then fails to encourage us to leave the safety of the car to dispose of the empty packaging in a responsible way; the concomitant reduction in the number of pedestrians using the pavements and countryside footpaths - even those who are obliged to travel on foot usually sink into a sort of social autism with the aid of their MP3 player or smart phone. The virtual obsolescence of doorstep milk deliveries not only divests us of yet another mode of capable guardianship, it also deprives us of a near-perfect form of bottle recycling. The increasing popularity of out-of-town shopping centres and online shopping has inevitably led to a reduced footfall of 'respectable citizens' in many traditional town centres, leaving the coast clear for the littering classes. The list could go on and on and, if left unchecked could potentially lead to the sort of dystopia that J K Galbraith dubbed "private affluence and public squalor."

As previously mentioned, all of the foregoing theories are more or less based on the concept of man as a rational calculator. This assumption, that offenders think before acting and conduct a cost-benefit analysis before deciding to engage in crime, has more than a few critics. The difficulty is that some offenders make almost no preparation for an offence, something that is especially true for young offenders. They do not consider the negative long-term consequences of the action; they are impulsive and focus on the immediacy of the

positive rewards associated with the offence. This criticism cannot be ignored, especially in the context of a casual or impulsive offence like littering. Even a conservative commentator like Theodore Dalrymple has serious misgivings about the rational choice premise:

"I do not ask myself, every time I have about me a piece of potential litter in a public place, 'Shall I throw this in the street, or shall I dispose of it in some other way?' Nor, having failed to ask such a question, do I rehearse in my mind all the possible pros and cons of throwing it in the street and, having weighed them up with the utmost care, decide against doing so. The reason I do not throw the potential litter in the street is my mother. Because of her, it simply does not occur to me to throw litter in the street, not even for a fraction of a second. Good behaviour is as much a matter of prejudice and habit as of ratiocination." (Dalrymple: 2011, p 151)

It is interesting that even Ron Clarke and his collaborators subsequently introduced the idea of 'bounded rationality', that is, they recognised psychological, cognitive or social limitations to the menu of options open to potential offenders. Although this deprived their theory of its original simplicity and objectivity, this development was perhaps necessary. Certainly, for our purposes, it enables us to explain the influence of Dalrymple's mother on his law-abiding behaviour. And it also allows us to link up with another conservative theory that stresses the importance of social norms without jettisoning the ideas of rational choice and free will.

Social Control Theory expounded by Travis Hirschi in his 1969 book 'Causes of Delinquency' - identifies the cause of crime as man's innate propensity for delinquency, combined with the weakening of social ties which allows such anti-social intransigence to break its bonds. But instead of focusing on why people commit crimes, he turned the question on its head. For Hirschi, it is law-abiding conformity that needs to be explained.

In Hirschi's initial theory, *social* bonds were the crucial restraint against criminality. He identified four types of bond: *attachment, commitment, involvement* and *belief*. In short, the stronger a person's links were to the conventional social order and ethical/legal norms, the less likely that person would be to commit crime (Hirschi: 1969). This almost goes without saying - it does indeed verge on the tautological. Nevertheless, and perhaps because of this very circularity, the theory retains both a logical and intuitive cogency.

In collaboration with Gottfredson, Hirschi subsequently shifted his focus from *social control* to **Self-Control***.* According to this later theory, once socialisation had occurred within the family, it was the life-long internalised ability to resist criminal temptation and/or delay gratification that was crucial. So the family is the key socialising institution responsible for restraining our natural human impulses toward deviance (Hirschi & Gottfredson: 1990 and 2005).

Torgler and his fellow researchers would certainly agree that it is social norms that help to explain law-abiding environmental compliance (Torgler *et al*: 2008). And Charles Murray (1990) in his 'Underclass' mode would applaud the emphasis on early socialisation within the family, though he would probably add that it is (non-absent) fathers who should be the primary role models, norm purveyors and capable guardians. Social Control/Self-Control theory is certainly well attuned to explaining low-level deviancy like littering, vandalism, etc and it gives some clues as to a longer-term solution to littering rather than just here-and-now prevention. Ironically perhaps, for a so-called right-realist perspective, this solution can involve state intervention in the early years of child socialisation. We shall revisit this strategy later in this essay. Suffice it to say here that for Hirschi and Gottfredson, the first

eight years are crucial. The Jesuits would certainly have agreed: *"Give me a child until he is seven, and I will give you the man".*

From the outset, Control theory was linked to a new research technique, the self-report survey. These surveys have consistently produced results that support the basic contentions of the theory, and have been used extensively by anti-litter campaign groups globally. The combination of a testable theory with a research technique that produces supportive results is very attractive, to say the least.

But in one respect, Control theory predicts and explains *too much* delinquency. For the norm-free, dysfunctionally-socialised, habitual litterbug, it hits the nail right on the head. But what about the casual, occasional litterer who is otherwise entirely law-abiding? For an answer to that question we have to turn to another variant of Control theory - **'Neutralisation and Drift'**.

According to Gresham Sykes and David Matza - in their 1957 essay - the majority of delinquents are not Hirschi's norm-free outsiders. Most of the time they are engaged in routine, law-abiding behaviours, just like everyone else, and most of them grow out of delinquency and settle down to law-abiding lives when they reach early adulthood. Acts that violate conventional social norms generate feelings of shame and guilt, which deters most adolescents from acts of delinquency. Potential offenders, therefore, must seek out ways to neutralise the guilt and guard their self-image if they choose to engage in delinquent behaviour. A way to do this is by conducting 'techniques of neutralisation' that provide short-term relief from moral constraint and allow individuals to drift back and forth between conventional and delinquent behaviour.

Although the theory is not comprehensive enough to serve as a stand-alone explanation for criminality, the idea of human beings drifting back and forth between a lower (individual) and higher (collective) level is uniquely equipped to account for occasional littering behaviour amongst otherwise law-abiding citizens. And the techniques of neutralisation clearly resonate within the rich array of verbatim rationales we encountered in Chapter 2 and the Appendix. *Denial of responsibility*: lack of bins, too much wrapping, it's just a fag end...that's not litter. *Denial of Injury*: Who's it harming? One more won't matter. *Denial of victims*: Who's complaining? They don't have to pick it up, everyone does it. *Condemnation of condemners*: nosey-parkers, do-gooders, kill-joys, what's it got to do with you, anyway? *Appeal to higher loyalties*: all of my mates do it; keeps the Council in a job, don't it? (this is the perfect neutralisation - the offence is perversely re-interpreted as a positive socio-economic intervention). The jury is still out on whether these excuses are actually pre-meditated moral anaesthesia, or simply *post-facto* rationalisations. But they are too common and too recurrent to ignore, and they show only too clearly the psychological hurdles that must be surmounted in the battle against litter.

So how have these criminological perspectives been implemented in practice?

Policy Interventions and Practical Solutions

As we have seen, the Broken Windows analysis became linked in the USA with the policing strategy of Zero Tolerance, developed by William Bratton, the NYPD chief during the 1990s. It involves highly-visible order maintenance and aggressive law enforcement, against even minor crimes and 'incivilities'. Researchers still disagree about whether the fall in New York crime rates in this period was a direct result of zero tolerance, or whether the causative factors lie in wider socio-economic changes. Zero tolerance certainly sends out a powerful rhetorical message, and there is little doubt that it eliminated signal incivilities such as littering and graffiti in many New York hot-spots. But it tends to ignore the fact that capable guardianship cannot be monopolised by the police. There literally aren't enough of them to go round. Any longer term solution must look towards guardianship being nurtured and embedded in the community itself. There is also the risk that over-zealous law enforcement could be counter-productive in the longer term if it was perceived to be heavy-handed and unfair.

This possibility is indeed recognised by Innes and Weston, who point out that intrusive and/or saturation policing can not only erode public trust in the police, but it can actually increase the sense of fear and perceptions of criminality within the community. Innes and Weston turn instead to the philosophy of community policing, underlining the need to engage with communities to understand the local problems that create insecurity. Local policing teams can then prioritise the issues that appear to have the highest signal values, and consequently improve local security and civic pride. The role of the police as an enabler is crucial:

"...'the big society' cannot do the heavy-lifting in tackling chronic ASB problems... Therefore, particularly in areas with a higher intensity of ASB problems, police have an important role in gripping the problems in order to create a space where community mobilisation can be seeded and grown...A certain degree of neighbourhood security appears to be a necessary condition for establishing citizen-based peer-to-peer cooperation and collaboration... How then can policing be used to facilitate these forms of increased citizen action and participation? There are important precedents for thinking about such matters to be found in the Home Office funded National Reassurance Policing Programme that ran between 2003-05 in 16 trial sites in England. This tested a policing model founded upon:

- Visible, accessible, familiar and effective officers;
- Community-intelligence led targeting of the signal crimes doing most harm to communities;
- Co-producing solutions with partners and the public." (Innes & Weston: 2010, pp 48-49).

The authors do acknowledge that when this programme was actually translated into Neighbourhood Policing, the last element (co-producing solutions with the public) was largely omitted from the standard operating procedures for localised policing. Therefore, the ultimate aim of leveraging the Big Society at grass-roots level was somewhat compromised. But the Signal Crime/Reassurance Policing model still has real potential. And it has the added bonus of taking the physical reality and social impact of littering very seriously.

Keeping our focus on longer term solutions, we must also recognise the positive impact of Control theories on early intervention programmes and wider educational initiatives. The Durkeimian heritage of Social Control theory means that it seeks regulation of the individual through policies fostering socialisation and integration into the social order, rather than

through policies of isolation and punishment. The theory therefore supports programmes to strengthen families, particularly with respect to effective child rearing. Where the focus is on Hirschi's later 'Self-Control' theory, the emphasis is on policies that assist the family to inculcate favourable self-concepts, impulse control, and frustration tolerance that can keep people out of trouble even in situations of weak external control. School programmes influenced by Control theory have tried to facilitate involvement in school activities and greater identification with the school and its local community. The aim is to urge school-children to accept the larger social structure and conventional 'middle-class' values as things to be taken for granted...as unconscious 'second nature'. Self-Control theory was, indeed, one of the inspirations behind New Labour's *Sure Start* and *Splash* programmes, which targeted parents whose children were seen to be at risk of offending, and offered them help and support. Analogous schemes can be found in the United States (*Head Start* and *Parents Anonymous*), Australia (*Head Start*) and Canada (Ontario's *Early Years Plan*).

Such schemes clearly hold promise for the future, especially in pre-empting C2DE youth littering. Perhaps this is the only way to implant Theodore Dalrymple's mother into the collective conscience! But these programmes are obviously expensive, and they have tended to become casualties of the shifting political and economic climate and the popularity of get-tough policies.

So in the here-and-now our hopes must fall back on the efficacy of the many practical solutions offered by 'Administrative Criminology'. And there are numerous success stories. For instance, Nottinghamshire Council conducted a local telephone survey of 1,000 households every six months and identified that alongside speeding vehicles and 'boy racers', around 29% of the local population claimed that littering was the biggest problem in their area (Burney, E. 2005, pp. 134-135). As a result, the Council introduced Neighbourhood

Wardens in 2003/04 to keep a watchful eye on littering and other incivilities. In contrast to some other warden experiments, Nottingham's wardens are empowered to issue Fixed Penalty Notices for a variety of offences which include, litter, graffiti and dog fouling. They have targeted particular littering hotspots, leading to more effective deterrence and apprehension rates. For instance, from April 2011 to January 2012, Mansfield District Council issued 454 penalty notices, a near 60% increase from the previous year (Anon, March 2012).

Another highly-successful application of Capable Guardianship is exemplified by Middlesbrough's celebrated talking CCTV, which aims to "bring the voice of authority to the street". The programme was trialled in early 2007 and proved to be an immediate success, with a noticeable drop in both anti-social behaviour and littering. Officials have observed that since its introduction, litterers have sheepishly picked up their rubbish and disposed of it in the nearest bin. According to Middlesbrough Council, the system created an extra layer of security and, as a result, the town's cleanliness has vastly improved (Home Office, April 2007).

Based on the success of the Middlesbrough experiment, twenty communities (including Darlington, Blackpool, Northampton and the London Boroughs of Southwark and Dagenham) have received funding from the Home Office to set up their own talking CCTV systems.

Arguably the most cost-effective anti-litter strategy has been the tax on the use of plastic carrier bags in retail outlets introduced in Ireland during 2002. This change brought about a significant reduction in littering (around 90%), and resulted in positive landscape effects (Convery *et al:* 2007). Wales, Northern Ireland and Scotland subsequently followed the Irish lead, and England is due to introduce the charge in 2015. Each year in England, more than

eight billion disposable bags are used; this breaks down to a staggering 130 per person. According to environmental campaigners, these bags can take up to 1,000 years to degrade. This causes serious harm to birds and marine life, with 70 bags littering every mile of Britain's coastline (Chapman: 2014).

Wales followed Ireland's initiative in 2011, introducing a 5p charge on the use of retail plastic carrier bags. Despite initial support for the carrier bag charge already being high (59% supported), the Welsh population became even more supportive after its implementation (70% supported). A study conducted by Poortinga *et al.* (2012) illustrated that own-bag usage in Wales rose from 61% before to 82% after the introduction of the charge. 64% of people in Wales now 'always' bring shopping bags to the supermarket (an increase of 22%). These findings coincide with the hypothesis of 'habit discontinuity' (Verplanken *et al*., 2008). Rather than using disposable carrier bags, people have embraced a more sustainable habit after the charge was implemented.

Scotland's decision to adopt the tax charge on plastic bags in June 2013 has been similarly successful, and it is hoped that this success will be repeated in October 2015 when England follows suit.

Since its establishment in 1955, Keep Britain Tidy has used a number of behaviour change strategies, ranging from the celebrity-endorsed campaigns - including the likes of Marc Bolan and Morecambe & Wise - in the 1970s, to the targeted campaigns used today, which focus on individual responsibility within identified market segments. Indeed, since 2001 Keep Britain Tidy has launched over twenty campaigns utilising this market segmentation concept, and has achieved 20-30% reductions in littering and over 70% changes in littering behaviour of participants questioned after a campaign (Keep Britain Tidy: October 2010)

A few examples will suffice...and give a useful insight into conceptualizing different types of litterer for possible future interventions:

- *Car Litter Campaign* (2009): based on the Litter Droppers segmentation data (as noted in Chapter 2), focusing on the 'Life's Too Short' segment;

- *General Litter Campaign* (2010) Litter Droppers segmentation research, targeting the 'Guilty' segment;

- *Dog Fouling Campaign* (2010): Litter Droppers segmentation research targeting the 'Justifiers' segment

- *Gum Campaign* (2012) (run with the Chewing Gum Action Group): based on the Gum Droppers segmentation data targeting the 'Excuses Excuses' segment.

Source: Zero Waste Scotland (2012)

One of Keep Britain Tidy's most successful behaviour interventions was its dog fouling campaign in 2002. To measure the success of the campaign (which used posters and celebrity campaigners to inform dog owners of the dangers of dog fouling), ten sites across England were monitored to examine whether the campaign had altered public behaviour. The results indicated there was a 40% drop in dog fouling in these areas. An attitude and awareness study also revealed that, of those questioned, 38% were likely to change their behaviour following the campaign (Keep Britain Tidy, October 2010).

Turning from organic to man-made detritus, in Sweden in 2006 a scheme was implemented for the returning and recycling of plastic bottles and aluminium cans, with financial incentives to encourage voluntary compliance (Bottle Bill Resource Guide, 2011).

The legislation requires every retailer to charge 0.5SEK (4p) extra on the original price of aluminium cans and 1SEK (8p) for plastic bottles. This is the consumer's deposit. To retrieve this deposit, the consumer, or whoever collects the container, must return it to the retailer or recycling depot. The system has achieved a return rate of 87% for aluminium cans and 83% for plastic bottles. This is substantially higher than the UK's 48% return rate for aluminium cans (Barnes, T 2008).

Bottle deposits used to be common in the UK until the late 1980s. The scheme was phased out as manufacturers found it cheaper to make new bottles or cans than to collect the old containers.

The 1950s style penny-for-a-bottle scheme was, in its time, a great success, with children actually collecting discarded bottles, and even canvassing householders door-to-door for unwanted bottles which they could then return to the seller to obtain the deposit. The Campaign to Protect Rural England urges Britain to bring back this method of recycling, arguing that it could save the country an estimated £160 million per annum for the public sector, working out to be around £7 per household, whilst also ensuring far more cans and bottles are recycled (Hogg, D., Fletcher, D., Elliot, T., and Von Eye, M. 2010).

Economic self-interest could clearly work wonders in the war against litter! And when such initiatives are effectively implemented, they remove many of the excuses from Matza's

techniques of neutralisation, and thereby block the 'Drift' of otherwise law-abiding citizens into littering behaviour.

Conclusion

We have seen how the definition of littering is at times ambiguous, even within legislation. The research regarding the determinants of littering and the identity of litterers has also been, on occasion, equivocal. On one hand there appears to be a statistically significant and consistent effect for age, with young adults (18-29) being more inclined to litter than the older generation. The findings for gender are rather more ambiguous. Even the age determinant was flipped on its head by Torgler *et al,* who found that the older, unmarried male generation is the least likely to have a strong environmental conscience. What does appear to be clear is that is a tangible correlation (and a possible causative link) between the number of youths on the streets and the level of littering. And researchers into Social Class and Littering have more or less concurred that those living in what are classed as C2DE areas, are more likely to litter than the more affluent members of society. This can be down to the education background as the more affluent tend to be more aware of the environmental impact of littering whereas those from the working class background tend to be less environmentally conscious. We have seen several success stories from local councils and anti-litter campaigns. However, from looking at international policies, such as the bottle bill in Sweden, we can see that Britain can still do more to prevent litter from plaguing our streets.

One must hope that in the longer term, a combination of economic disincentives (e.g. instant fines, carrier-bag charging and bottle/can deposits), ample provision and maintenance of litter-bins, capable guardianship (neighbourhood policing, neighbourhood

wardens, informal social control at community level, and CCTV surveillance) and well-funded early intervention programmes, will ultimately override the dysfunctional social and moral norms created by defective Social/Self Control.

More case studies are needed at the local level to allow a full evaluation of litter-prevention strategies. In this essay, I have focused primarily on the contributions of neo-classical/situational crime and right realist perspectives, as these are the only theories that have, to date, tackled the problem of littering head-on. Criminological theorists to the left of the political spectrum need to step up to the mark and show that their schools-of-thought can provide alternative and/or additional insights into the causes of, and solutions to, a problem that continues to affect the Man on the Clapham Omnibus on a daily basis. This may mean naming and shaming members of those socio-economic groups that the left traditionally regard as marginalised victims of labelling and stigmatisation. But only when Left Realists and Green Criminologists grapple with the problem practically and persuasively will littering truly cease to be the Cinderella of Criminology.

Bibliography

Anon, (20 November 2008). 'Can the Can'. *The Economist*,

Anon. (March 2012) 'Mansfield litter fines jump by nearly 60%' BBC News, Nottingham

[available at: http://www.bbc.co.uk/news/uk-england-nottinghamshire-17341358]

Anon, (2013/14) 'Keep Britain Tidy - The Local Environmental Quality Survey of England

2013/14' [available at:

http://www.keepbritaintidy.org/.../Surveys/KBT_LEQSE_report_2013] (Accessed

19/11/2014)

Anon. *(Accessed 19/11/2014)* [available at:

http://www.keepbritaintidy.org/.../Surveys/KBT_LEQSE_report_2013]

Barajas, E (2014) 'The Quiet Revolution: Shattering the Myths about the American Justice

System'. *Bloomington, IN: iUniverse*.

Barnes, T. (2008) 'Why We Need a UK Bottle Bill' *Litter Heroes* [available at:

http://litterheroes.co.uk/bottlebill.htm]

Barnes, T (2010) 'What's Littering Britain? A Survey of British Litter' [available at:

http://www.litterheroes.co.uk] *Accessed 19/11/2014*

Beck, R. W. (2007). 'Literature review—Litter: A review of litter studies, attitudes surveys,

and other litter related literature' *Keep America Beautiful Report*

Bottle Bill Resource Guide (2011) 'Beverage Container Legislation Around the World:

Sweden' [available at: http://www.bottlebill.org/legislation/world/sweden.htm]

Bratton, W. (1998) 'The Turnaround: How America's Top Cop Reversed the Crime Epidemic' *New York: Random House*

Brutus v Cozens [1973] AC 854, [1972] UKHL 6

Burney, E. (2005) 'Making People Behave: Anti-social Behaviour, Politics and Policy' *Cullompton: Willan Publishing*

Burney, E. (2009) 'Making people behave: Anti-social behaviour, Politics and Policy' *2nd Edition Collumpton: Willan Publishing.*

Chapman, J. (2014) 'At last! Plastic bags are banished: Victory for Mail's six-year campaign as Ministers force reluctant supermarkets to impose 5p charge' *Daily Mail Online* [available at: http://www.dailymail.co.uk/news/article-2647716/At-Plastic-bags-banished-Ministers-force-reluctant-supermarkets-impose-5p-charge.html]

Cialdini, R. B., Kallgren, C. A., & Reno, R. R. (1991). 'A focus theory of normative conduct: A theoretical refinement and re-evaluation of the role of norms in human behavior.' *Advances in Experimental Social Psychology, 21, 201-234*

Clarke, R.V. (1980) 'Situational Crime Prevention: Theory and Practice' *British Journal of Criminology, Vol. 20, No. 2*

Clarke, R. V. (1997) 'Situational crime prevention: successful case studies' *Second ed. Harrow and Heston*

Clean Neighbourhoods and Environment Act (2005)

Clemency, K (2013) 'Moms are consuming more energy drinks than you might think' *The Cambridge Group, Neilsen.* [available at: http://www.nielsen.com/us/en/insights/news/2013]

Cohen, L. E. and Felson, M. (1979) 'Social change and Crime Rate Trends: A Routine Activity

    Approach' *American Sociological Review, Vol. 44 (August): pg 558-608*

Convery, F., McDonnell, S., and Ferreira, S. (2007) 'The most popular tax in Europe? Lessons

    from the Irish plastic bags levy.' *Environment and Resource Economics, 38, 1-11*

Crosier, A. (Nov. 2005) 'ASH Research Report on Health Inequalities.' *London: ASH*

Crump, S.L., Nunes, D.L. and Crossman, E.K. (1977). 'The Effects of Litter on Littering

    Behaviour in a Forest Environment' *Environment and Behavior. 9:137-146.*

Dalrymple, T (2011) 'Litter - How Other People's Rubbish Shapes Our Lives.*' London: Gibson

    Square.*

Danielson, L.,Hoban, T.J.,Van Houtven, G. and Whitehead, J.C. (1995). 'Measuring the

    benefits of local public goods: environmental quality in Gaston County, North

    Carolina' *Applied Economics. 27: 1253-1260*

Department for Environment Food & Rural Affairs (DEFRA) (April 2006) 'Code of Practice on

    Litter and Refuse'

Department for Environment Food & Rural Affairs (DEFRA) (2007) 'Local Environmental

    Enforcement – Guidance on the use of Fixed Penalty Notices'

Department of Health (2004) 'Choosing Health: Making Healthier Choices Easier.' London:

    Department of Health

Dogs (Fouling of Land) Act (1996)

Doward, J. (26 July 2014) 'Vaping is ever more popular, but is it a smoking cure or a new

    hazard?' *The Guardian Newspaper (Accessed 25/11/2014)* [available at:

http://www.theguardian.com/society/2014/jul/26/vaping-answer-to-smoking-or-hazard]

Edwards, A., Allen, V. and Ledwith, M. (2013) 'Fined £160 for spitting in the street: First ever prosecutions under council's tough littering laws' [available at: http://www.dailymail.co.uk/news/article-2430724]

Environmental Protection Act (1990), Sections 87(2)-(3).

Environmental Protection Act (1990), Section 33

Finnie, W. C. (1973) 'Field experiments in litter control.' *Environment and Behavior, 5, 123-144*

Galbraith, J. K. (1998) 'The Affluent Society' *Houghton Mifflin Company: New York*

Geller, E.S., Witmer, J.F., and Tuso, M.E. (1977). 'Environmental interventions for litter control.' *Journal of Applied Psychology, 62, 344-351.*

Groombridge, N (2013) 'Matter All Over the Place: Litter, Criminology and Criminal Justice', Chapter 25 in South, N and Brisman, A (Eds), (2013): 'Routledge International Handbook of Green Criminology'*. Abingdon: Routledge.*

Halpern, D. (September 2010) 'Give the Big Society a Break'. *Prospect* p.22-23

Hammersmith & Fulham Online Newsletter (2013) [available at: http://www.lbhf.gov.uk/Directory/News/First_court_conviction_for_urinating_in_street.as]

Hansard Source (13 October 2011) - HC Deb, c514W

Hirschi, T. (1969). 'Causes of Delinquency.' *Berkeley: University of California Press, p31*

Hirschi, T. and Stark, R. (1969) 'Hellfire and delinquency' *Social Problems, 202-213*

Hirschi, T. and Hindelang, M. G. (1977) 'Intelligence and delinquency: A revisionist review' *American Sociological Review, 571-587*

Hirschi, T. (1977) 'Causes and Prevention of Juvenile Delinquency' *Sociological Inquiry 47 (34), 322-34*

Hirschi, T. and Gottfredson, M. R. (1990). 'A General Theory of Crime'. *Stanford: Stanford University Press.*

Hirschi, T. and Gottfredson, M. R. (2005). 'Punishment of Children from the Perspective of Control Theory' In Donnelly, M. and Straus, M. A. (2005) 'Corporal Punishment of Children in Theoretical Perspective.' *New Haven, CT; London, UK: Yale University Press.*

HMIC (2012) 'Policing Anti-Social Behaviour - The Public Perspective: Wave 2' Ipsos MORI [available at: http://www.justiceinspectorates.gov.uk/hmic]

Hogg, D., Fletcher, D., Elliot, T., and Von Eye, M. (2010) 'Have we got the bottle? Implementing a deposit refund scheme in the UK' *Campaign to Protect Rural England, Eunomia Research & Consulting Ltd*

Home Office Report (April, 2007) 'Talking CCTV brings voice of authority to the street' [available at: http://www.statewatch.org/news/2007/apr/uk-talking-cctv.pdf]

Home Office (July 2011) 'British Crime Survey and Police Recorded Crime' *2nd Edition London: HMSO*

Innes, M. and Fielding, N. (2002) 'From Community To Communicative Policing: 'Signal Crimes' And The Problem Of Public Reassurance' *Sociological Research Online, vol. 7, no. 2*

Innes, M. and Roberts, C. (2008) 'Reassurance policing, community intelligence and the

coproduction of neighbourhood *order' in T. Williamson (ed.) The Handbook of*

Knowledge Based Policing. Chichester: Wiley

Innes, M., Abbot, L., Lowe, T., Roberts, C. and Weston, N. (April, 2009) 'Signal Events,

Neighbourhood Security, Order and Reassurance in Cardiff' *Universities Police*

Science Institute (UPSI), Cardiff University.

Innes, M. and Weston, N. (2010) 'Re-Thinking the Policing of Anti-Social Behaviour'

Universities Police Science Institute (UPSI), Cardiff University

Jeffery, C. R. (1971) 'Crime Prevention Through Environmental Design' *Sage Publications*

Keep Britain Tidy, (October 2010) 'Memorandum by Keep Britain Tidy' *(BC 70) House of*

Lords, Science and Technology Committee

Keep Wales Tidy (November 2010) 'Litter in Wales: Understanding Littering and Litterers,

Executive Summary Report' *Beaufort Research, Cardiff*

Keep Britain Tidy Report (July 2013) 'Time for a bag charge in England' [available at:

http://www.keepbritaintidy.org/time-for-a-bag-charge-in-england/2222/2/1/476]

Keizer, K; Lindenberg, S; Steg, L (2008). 'The Spreading of Disorder'. *Science (5908): 1681–5.*

doi:10.1126/science.1161405. PMID 19023045.

Kircher, L (2004) 'Breaking Down the Broken Windows Theory' *Pacific Standard, 7 Jan 2014*

[available at: http://www.psmag.com/navigation/politics-and-law/breaking-broken-

windows] *(Accessed 25 Nov 2014)*

Krauss, R. M., Freedman, J. L., & Whitcup, M. (1976). 'Field and laboratory studies of

littering.' *Journal of Experimental Social Psychology, 14, 109-122*

Long, J., Harré, N. and Atkinson, Q, D. (2013) 'Understanding Change in Recycling and

     Littering Behavior Across a School Social Network' *Society for Community Research*

     and Action, American Journal of Community Psychology

Lyndhurst, B. (2012) 'Rapid Evidence Review of Littering Behaviour and Anti-Litter Policies'

     Zero Waste Scotland Report, Brook Lyndhurst

Marsh, A. and McKay, S. (1994) 'Poor Smokers.' *London: Policy Studies Institute*

Matthews, R (1992) 'Replacing Broken Windows: Crime, Incivilities and Urban Change' in

     R.Matthews and J. Young (eds.), 'Issues in Realist Criminology' *London: Sage*

Murray, C. (1990) 'The emerging British underclass' *Institute of Economic Affairs, London. IEA*

     Health and Welfare Unit.

Newman, O. (1972) 'Defensible space. Crime prevention through urban design.*' London:*

     MacMillan

Office for National Statistics (2004). 'General Household Survey 2003/04.' [available at:

     http://www.statistics.gov.uk/ghs]

Poortinga, W. Whitmarsh, L. and Suffolk, C. (2012). 'The Introduction of a Single-Use Carrier

     Bag Charge in Wales: Attitude Change and Behavioural Spillover Effects.' *WSA*

     Working Paper Series ISSN 2050-8522

Roberts, J. (2014) 'R.A.T. Catcher: Crime Prevention and the Routine Activity Theory' *Security*

     Strategies, LLC

Sampson, R. J. and Raudenbush, S. W. (1999). 'Systematic Social Observation of Public

     Spaces: A New Look at Disorder in Urban Neighborhoods'. *American Journal of*

     Sociology 105 (3): 603–51

Schultz, P., Bator, R., Large, L., Bruni, C. and Tabanico, J. (2011) 'Littering in Context: Personal and Environmental Predictors of Littering Behavior' *Environment and Behavior 45: 35*

Sykes, G. and Matza, D. (1957) 'Techniques of Neutralisation: A Theory of Delinquency' *American Sociological Review 22: pp. 667—70*

Thaler, R. and Sunstein, C. (2008) 'Nudge: Improving Decisions about Health, Wealth and Happiness.' *New Haven: Yale University Press*

Torgler, B. and Garcia-Valiñas, M. (2007). 'The Determinants of Individuals' Attitudes Towards Preventing Environmental Damage' *Ecological Economics. 63: 536-552*

Torgler, B. García-Valiñas, M. and Macintyre, A . (2008). 'Justifiability of Littering: An Empirical Investigation'. *NOTA DI LAVORO. Vol: 59*

Veisten, K., Hoen, H.F.,Navrud, S. and Strand, J. (2004). 'Scope insensitivity in contingent valuation of complex environmental amenities' *Journal of Environmental Management. 73: 317-331*

Verplanken, B., Walker, I., Davis, A., and Jurasek, M. (2008). 'Context change and Travel mode choice: Combining the habit discontinuity and self activation hypotheses.' *Journal of Environmental Psychology, 28, 121-127*

Victorian Litter Action Alliance *(Accessed 19/11/2014)* [available at: http://www.litter.vic.gov.au/about-litter/littering-behaviour]

Welsh Assembly Government (June, 2010) 'Towards zero waste. One Wales: One planet.' *Overarching waste strategy document for Wales*

Williams, E., Curnow, R. and Streker, P. (1997) 'Understanding Littering Behaviour in Australia.' *Beverage Industry Environment Council*

Wilson, J. Q. and Kelling, G. L. (1982) 'Broken Windows: The Police and Neighborhood Safety'

The Atlantic Monthly, March 1982

Witzke, H.P. and Urfei, G. (2001). 'Willingness to pay for environmental protection in

Germany: coping with the regional dimension' *Regional Studies. 35: 207-214*

Zelezny, L.C., Chua, P.P., and Aldrich, C. (2000). 'Elaborating on gender differences in

environmentalism' *Journal of Social Issues. 56: 443-457*

Appendix

2010 *Keep Wales Tidy* Survey:

As part of a wider research project on littering in Wales, in 2010 *Keep Wales Tidy* created a segmentation model of 809 Welsh adults who admitted to littering. The objective was to improve understanding of attitudes towards littering, and how these link to the behaviour and demographics of those within each cluster. The results can be summarised as follows:

Segment Name	Characteristics	Littering Behaviour
Litter louts (17%)	Youngest, most male and most 'downmarket' segment; most likely to be smokers. More likely than other segments to access internet for social networking.	Heavy litterers; much more likely than other segments to drop a range of different items, including some larger items (e.g. fast food packaging, cans, bottles). Litter is an ingrained social habit. Find litter to be excusable and acceptable in a range of different scenarios. Give little, if any, thought to consequences.
Not my fault (28%)	More likely than the average litterer to be aged 16-34, C2DE, and to smoke. Even balance of genders. More likely than any other group to listen to commercial radio.	Second heaviest littering segment (although much lower than 'litter louts'). Most likely to consider littering as unacceptable in theory, but find excuses for littering when it is perceived to be beyond their control
Does that count? (28%)	More likely than the average litterer to be male and older. Social grade and propensity to smoke in line with average litterer. More likely than any other group to read local/regional newspapers.	Generally lighter litterers – fruit and cigarette ends most likely to be dropped. Largely anti-littering and do not look for excuses, but do not appear to count fruit and leaving things near a bin as littering.
Principled light litterers (27%)	Most 'upmarket' and most female segment, least likely to smoke. Also tend to be older. More likely than any other group to read UK national newspaper.	The lightest litterers of all segments – fruit and food are only items which are dropped where levels are above or close to the average litterer. Generally believe littering to be lazy and unacceptable.

Focus groups were then conducted with three of the four segments of litterer in greater detail: *Litter Louts*, *Not My Fault*, and *Does that Count*. This stage of the research explored rationales behind littering amongst three of the most prolific littering groups in Wales. The rationales are summarised in the table below:

Rationale	Key Issues	Example Verbatims
Others' responsibility	Local Council at fault, Never a bin when needed State of bins	"I'm not holding this any longer and I can't see any bins around. I've done that before, I've been somewhere and I've had a wrapper or something and I've held on to it for so long." (Not My Fault)
Social factors	Alcohol encourages Group mentality	"It's like when you're in a big group, if there's a big group you can't imagine someone walking to a bin...'excuse me, I'm just going to the bin'" (Litter Lout)
Habit	Never taught not to Just the norm	"It's just, like, from the way you've been brought up, living in these bad areas, it's just in your mind-set to think like that" (Litter Lout)
Not concerned	Little care for local area Self-focused Anti-authority	"I walked through another town … and I think I dropped something and the bloke said "pick that up now". And I gave him a few words of my choice but I weren't going to pick it up … I think it'd be more embarrassing for me to go and pick it up and put it in the bin than to just walk off" (Litter Lout)
No one can see me	Feel guilt Out of sight out of mind	"I think if I was walking down a country lane or something with rubbish, I'd probably think I'd drop it rather than just keep carrying it, just throw it in some hedge or something. No one is about, it's like driving in the car, goes out the window" (Not My Fault)
Prevalence	Gives permission Makes it the norm Run-down areas	"I just had an envelope where I'd opened my mail and where I live there we all rubbish by there and I was walking down to the shops and I just threw the empty envelope" (Not My Fault)
Size, condition	Smaller items OK If greasy, sticky	"If I've got food I'll drop it, but if I've got like a big bag then I will carry it until I see a bin somewhere" (Does that Count)
Not litter	Smaller items Fruit Certain scenarios	"[Butts] it's only a little thing, at the end of the day … What problem's it causing?" (Litter Lout)

Source: *Keep Wales Tidy: Litter in Wales: Understanding Littering and Litterers, Executive Summary Report (Nov 2010).*