

# Situational Crime Prevention

## Successful Case Studies

**Second Edition**

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# Preface

Only five years ago the first edition of this book was published, yet a number of important developments during these years have made necessary this second, extensively revised volume. Most striking is the large increase in the successful applications of situational prevention reported in the literature. For the first edition it was difficult to collect sufficient case studies to reproduce. For this second edition, the twenty-three studies included are merely a sample of the three or four times that number considered. Indeed, the difficulty on this occasion was not in finding enough studies, but in deciding which to exclude. Ten of the case studies in the first edition which had proved particularly informative in classroom discussions were retained and, of the thirteen new ones, three were specially written or adapted for this volume.

These twenty-three case studies encompass a broader range of settings and offenses, including "everyday" crimes committed by ordinary people. Indeed, the wider application of situational measures, together with developments in preventive technology, has led to an expanded classification of opportunity-reducing techniques described in the Introduction. To the twelve techniques included in the first edition that increase the effort or risks of crime and reduce its rewards, four techniques that "remove excuses" for crime have now been added.

Some new concepts that are expanding the reach and appeal of situational prevention are also discussed in the Introduction. As anticipated in the first edition, the concept of "diffusion of benefits" (the idea that focused crime prevention efforts can sometimes bring benefits beyond the targeted settings) has served as a useful counterpoint to hypothesized displacement effects, which, in several recent reviews, have not been found to be as extensive or pervasive as some critics had argued. Another important new concept is that of repeat victimization, which is proving to be as valuable as that of "hot spots" in helping to focus crime prevention effort. Both concepts are also helping to focus experiments in

problem-oriented policing, which shares many common features with situational prevention, and which has been embraced in recent years by many of the Nation's most progressive police forces.

The focus on crime prevention successes has been retained in this second edition, though the Introduction includes discussion of some failures of situational prevention as well as of ethical and other problems of implementation. As evidence accumulates that situational prevention is effective in a wide variety of contexts, evaluations might increasingly probe the limits of the approach and make comparisons between different ways of reducing opportunities. This will require a broader methodological approach, including detailed analyses of the implementation process. As discussed in the Introduction, however, the main purpose of evaluation should be to refine the principles of opportunity reduction rather than attempt to produce concrete data about the effectiveness of situational measures in all settings.

As situational prevention becomes better known, scholars from a wider range of disciplines may be drawn into discussions of the theoretical, political and ethical implications of an approach to crime prevention focused not upon changing offenders, but on modifying the settings in which crimes occur. The implications are indeed profound. They involve questions about the determinants of behavior as well as about criminal justice policy. They raise moral questions about society's attitudes to crime and criminals, and philosophical and political questions about the kind of society in which we wish to live. On the other hand, choice may be an illusion since irreversible social change has already occurred and it is our attitudes that may be lagging. Indeed, it may be that concepts of the State, the family and the community — the mainstays of current criminal policy — have less relevance today in a world that is shaped principally by economic forces, but in which individuals place a premium on autonomy in their daily lives. To adjust to these social changes, new concepts, including situational crime prevention, must be accommodated within the academic and political discourses on crime control.

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# **PART ONE**

## **Introduction**

**by  
Ronald V. Clarke**

**S**ITUATIONAL CRIME PREVENTION departs radically from most criminology in its orientation (Clarke, 1980; Clarke and Mayhew, 1980). Proceeding from an analysis of the circumstances giving rise to specific kinds of crime, it introduces discrete managerial and environmental change to reduce the opportunity for those crimes to occur. Thus it is focused on the settings for crime, rather than upon those committing criminal acts. It seeks to forestall the occurrence of crime, rather than to detect and sanction offenders. It seeks not to eliminate criminal or delinquent tendencies through improvement of society or its institutions, but merely to make criminal action less attractive to offenders. Central to this enterprise is not the criminal justice system, but a host of public and private organizations and agencies — schools, hospitals, transit systems, shops and malls, manufacturing businesses and phone companies, local parks and entertainment facilities, pubs and parking lots — whose products, services and operations spawn opportunities for a vast range of different crimes.

As illustrated by the case studies in this volume, dozens of documented examples now exist of successful situational prevention involving such measures as surveillance cameras for subway systems and parking facilities, defensible space architecture in public housing, target hardening of apartment blocks and individual residences, electronic access for cars and for telephone systems, street closures and traffic schemes for residential neighborhoods, alcohol controls at festivals and sporting fixtures, training in conflict management for publicans and bouncers, and improved stocktaking and record keeping procedures in warehouse and retail outlets (cf. Clarke, 1995).

Many of these successes were obtained by hard-pressed managers seeking practical ways to solve troublesome crime problems confronting their businesses or agencies. Only rarely were they assisted by criminologists, who, excepting a small handful of government researchers overseas, have generally shown little interest in situational prevention. In addition, situational prevention has rarely been accorded attention in policy debates about crime control, especially those in the United States.

This neglect stems from two mistakes of modern criminology. First, the problem of explaining crime has been confused with the problem of explaining the criminal (Gottfredson and Hirschi, 1990). Most criminological theories have been concerned with explaining why certain individuals or groups, exposed to particular psychological or social influences, or with particular inherited traits, are more likely to become involved in delinquency or crime. But this is not the same as explaining why crime occurs. The commission of a crime requires not merely the existence of a motivated offender, but, as every detective story reader knows, it also requires the opportunity for crime. In Cohen and Felson's (1979) terminology, it also requires the availability of a suitable target and the absence of a capable guardian. Thus, crime cannot be explained simply by explaining criminal dispositions. It also has to be shown how such dispositions interact with situational factors favoring crime to produce a criminal act (Ekblom, 1994).

The second related mistake of modern criminology has been to confuse the problem of controlling crime with that of dealing with the criminal (Wilkins, 1990). The surest route to reducing crime, it has been assumed, is to focus on the offender or potential offender. Most textbook discussions of crime control have therefore distinguished only between two broad kinds of measures, formal and informal social control. Formal control refers to society's formally constituted legal institutions of the Law and the criminal justice system designed to sanction offenders, to confine or rehabilitate them, and to deter crime among

the population at large. Informal social control refers to society's attempts to induce conformity through the socialization of young people into the norms of society, and through people's supervision of each other's behavior, reinforced by rule making, admonition and censure. Whether formal or informal, these controls are exclusively focused upon offenders, actual or potential.

It has been argued that one important consequence of failing to separate the problems of dealing with offenders and controlling crime has been to divert the criminal justice system from its essential purpose of dispensing justice (von Hirsch, 1976). More germane to the present discussion, however, is that this failure has also resulted in the criminological and policy neglect of a third important group of crime control measures, additional to formal and informal social controls, but intertwined with and dependent on them. These are the extensive "routine precautions" taken by individuals and organizations (Felson and Clarke, 1995). Every day, we all do such things as lock our doors, secure our valuables, counsel our children, and guard our purses to reduce the risk of crime. To this end, we also buy houses in safe neighborhoods, we invest in burglar alarms and we avoid dangerous places and people. Similarly, schools, factories, offices, shops and many other organizations and agencies routinely take a host of precautions to safeguard themselves, their employees and their clients from crime. It is into this group of crime control measures that situational crime prevention fits. Indeed, it can be regarded as the scientific arm of routine precautions, designed to make them more efficient and beneficial to society as a whole.

— Criminologists and policy analysts have assumed that the principal value of these precautions is not in reducing overall crime rates, but in protecting individual people and agencies from victimization. This is partly because situational measures focused on particular places or highly specific categories of crime cannot make much impression on the overall crime statistics. It has also been assumed, however, that faced with impediments offenders will merely displace their attention elsewhere, with no net reduction in crime.

This assumption flows directly from the dispositional error of modern criminology and, as shown below, is not supported by empirical research which has generally found rather little displacement. Reducing opportunities for crime can indeed bring substantial net reductions in crime. As this evidence becomes more widely known, and situational prevention is taken more seriously by policy makers, the debate will move on to the ethical and ideological implications of situational measures. This is already apparent in countries such as Britain and the Netherlands where situational prevention is becoming an integral, though still small, component of government crime policy. As Garland (1996) has argued, these countries have seen a shift in the discourse of crime control, which is no longer seen to be the exclusive province of the government, but something that must be shared with all sectors of society. Consequently, a multitude of public and private actors are now finding that their routine precautions are becoming a matter of public duty. More significantly, governments now seem to be promoting a range of precautionary measures that many people find objectionable. When video surveillance of public places and street closures in residential areas become part of official policy, fears of Orwellian methods of social control are unleashed. These concerns are reinforced by developments in technology that make people believe government control is becoming too pervasive, intrusive and powerful.

These worries about the application of situational controls are widespread, and have become entangled with diverse ideological objections from across the political spectrum. The Right, especially in America (cf. Bright, 1992), sees situational prevention as an

irrelevant response to crime because it neglects issues of moral culpability and punishment. Moreover, it "punishes" the law-abiding by infringing freedom and privacy. The Left characterizes it as politically and socially naive in its neglect of the role of social and economic inequities in causation and of political muscle in the definition of crime (Young, 1988). Liberals assert that by "tinkering" with symptoms it diverts attention from the need to tackle the "root causes" of crime such as unemployment, racial discrimination, substandard housing, inadequate schooling and inconsistent parenting (Bottoms, 1990). Before exploring these points in more depth, however, a more detailed account of situational crime prevention and its theoretical background is needed.

### ***Definition of Situational Prevention***

Situational prevention comprises opportunity-reducing measures that (1) are directed at highly specific forms of crime, (2) involve the management, design or manipulation of the immediate environment in as systematic and permanent way as possible, (3) make crime more difficult and risky, or less rewarding and excusable as judged by a wide range of offenders.

Several features of the definition relevant to the more extended discussion of situational crime prevention below should be noted. First, it makes clear that situational measures must be tailored to highly specific categories of crime, which means that distinctions must be made, not between broad categories such as burglary and robbery, but rather between the different kinds of offenses falling under each of these categories. Thus, Poyner and Webb (1991) have recently argued that preventing domestic burglaries targeted on electronic goods may require different measures from those needed to prevent domestic burglaries targeted on cash or jewelry. This is because of the many differences that existed between the two kinds of burglary in the British city they studied. When the targets were cash or jewelry, burglaries occurred mostly in older homes near to the city center and apparently were committed by offenders operating on foot. When the targets were electronic goods such as TVs and VCRs, the burglaries generally took place in newer, more distant suburbs and were committed by offenders with cars. The cars were needed to transport the stolen goods and had to be parked near to the house but not so close as to attract attention. The lay-out of housing in the newer suburbs allowed these conditions to be met and Poyner and Webb's preventive suggestions consisted principally of means to counter the lack of natural surveillance of parking places and roadways in new housing developments. These suggestions were quite different from those they made to prevent burglary in the inner city, which focused more on improving security and surveillance at the burglar's point of entry.

The need to tailor measures to particular offenses should not be taken to imply that offenders are specialists (cf. Cornish and Clarke, 1988) — only that the commission of specific kinds of crime depends crucially on a constellation of particular environmental opportunities and that these opportunities may need to be blocked in highly specific ways. Indeed, the second important feature of the definition of situational prevention is the implicit recognition that a wide range of offenders, attempting to satisfy a variety of motives and employing a variety of methods, may be involved in even highly specific offenses. It is further recognized that all people have some probability of committing crime depending on the circumstances in which they find themselves. Thus situational prevention does not draw hard distinctions between criminals and others.

The third point deriving from the definition is that changing the environment is designed to affect assessments made by potential offenders about the costs and benefits associated with committing particular crimes. These judgments are dependent on specific features of the objective situation and determine the likelihood of the offense occurring. This implies some rationality and a considerable degree of adaptability on the part of offenders.

The definition recognizes, fourth, that the judgments made by potential offenders include some evaluation of the moral costs of offending. We may all be prepared to steal small items from our employers, but few of us would be willing to mug old ladies in the street. Not all offenses are equally reprehensible, even in the eyes of the most hardened offenders. This means that making it harder to find excuses for criminal action may be sometimes be an effective opportunity-reduction technique. It also means that differences in the moral acceptability of various offenses will impose limits on the scope of displacement.

Finally, the definition of situational prevention is deliberately general in that it makes no mention of any particular category of crime. Rather, situational prevention is assumed to be applicable to every kind of crime, not just to "opportunistic" or acquisitive property offenses, but also to more calculated or deeply-motivated offenses. Whether offenses are carefully planned or fueled by hate and rage, they are all heavily affected by situational contingencies (Tedeschi and Felson, 1994). Thus, rates of homicide are importantly influenced by the availability of handguns. All offenders, however emotionally aroused or determined, take some account of the risks and difficulties of particular situations.

With respect to crimes thought to be the province of "hardened" offenders, evidence is now accumulating of successes achieved by situational measures, including the virtual elimination of aircraft hijackings by baggage screening (Wilkinson, 1986) and substantial reductions in robbery achieved by target hardening measures in post offices (Ekblom, 1988b), convenience stores (*Case Study #14*) and banks (Gabor, 1990; Grandjean, 1990; Clarke <sup>a/.</sup>, 1991).

Crimes of sex and violence have been regarded as less amenable to situational controls because they are less common and less likely to cluster in time and space (Heal and Laycock, 1986; Gabor, 1990). However, some examples will be provided below of the successful control of violence through deflecting offenders (for example, by preventing the congregation of large groups of drunken youths at pub-closing time) or through situational controls on alcohol and weapons. One particularly instructive example of controls on a "crime facilitator" is provided by the introduction of Caller-ID in New Jersey, which, by threatening the anonymity of callers, seems to have produced a substantial reduction in obscene phone calling (*Case Study #5*). Without this evidence, many people might have argued that obscene phone calling, a sexual crime that seems to strike at random, is precisely the kind of offense that would be unamenable to situational controls. A similar argument might have been made about domestic violence, but encouraging evidence is beginning to emerge from an experimental program in England that providing personal alarms to repeat victims may inhibit the aggressor (Farrell and Pease, 1993).

The lesson is that the limits of situational prevention should be established by closely analyzing the circumstances of highly specific kinds of offense, rather than by theoretical arguments about the presumed nature of motives for broad categories of crime such as sexual or violent offenses.

### ***The Four Components of Situational Crime Prevention***

As mentioned, much existing activity falling under the definition of situational crime prevention represents problem-solving undertaken by managers in a variety of public and private agencies. In some instances, mistakes might have been avoided and less time taken to develop solutions had those involved been familiar with the elements of situational prevention. One purpose of this book, therefore, is to consolidate the knowledge obtained through these independent efforts and to show how the criminological framework provided by situational prevention enables the lessons learned from dealing with specific crimes in specialized contexts to be more broadly generalized. This framework has four components:

1. A theoretical foundation drawing principally upon routine activity and rational choice approaches,
2. A standard methodology based on the action research paradigm,
3. A set of opportunity-reducing techniques, and
4. A body of evaluated practice including studies of displacement.

### ***Theoretical Origins—The Role of Situational Factors in Crime***

The development of situational prevention was stimulated by the results of work on correctional treatments undertaken in the 1960s and 1970s by the Home Office Research Unit, the British government's criminological research department (Clarke and Cornish, 1983). This work contributed to the demise of the rehabilitative ideal (Martinson, 1974; Brody, 1976) and forced researchers in the Unit, charged with making a practical contribution to criminal policy, to review the scope and effectiveness of other forms of crime control. The review concluded that there was little scope for reducing crime through the essentially marginal adjustments that were practically and ethically feasible in relation to policies of incapacitation, deterrent sentencing, preventive policing or "social" prevention (Tilley, 1993c). But it did identify opportunity-reduction as a worthwhile topic for further research, largely on the basis of some findings about misbehavior in institutions. It had been discovered in the course of the work on rehabilitation that the probability of a youth's absconding or re-offending while resident in a probation hostel or training school seemed to depend more upon the nature of the institutional regime to which he was exposed than on his personality or background (Tizard *et al.*, 1975). Particularly important appeared to be the opportunities for misbehavior provided by the institutional regime — opportunities that could be "designed out."

If institutional misconduct could in theory be controlled by manipulating situational factors, it was reasoned that the same might be true of other, everyday forms of crime. Though not consistent with most current theory, support for the Home Office position was found in criminological research that had found immediate situational influences to be playing an important role in crime, including: Burt's (1925) studies of delinquency in London, showing that higher rates of property offending in the winter were promoted by longer hours of darkness; Hartshorne and May's (1928) experimental studies of deceit, showing that the likelihood of dishonest behavior by children was dependent on the level of supervision afforded; geographical studies showing that the distribution of particular

crimes is related to the presence of particular targets and locations such as business premises, drinking clubs, and parking lots (Engstad, 1975); and demonstrations that fluctuations in auto theft reflect the number of opportunities as measured by the numbers of registered vehicles (e.g. Wilkins, 1964).

The Home Office position was also consistent with psychological research on personality traits and behavior that was finding a greater than expected role for situational influences (Mischel, 1968), and with an emerging body of work on the sociology of deviance, including studies by: Matza (1964) who argued against deep motivational commitment to deviance in favor of a "drift" into misconduct; Briar and Piliavin (1965) who stressed situational inducements and lack of commitment to conformity; and Yablonsky (1962) and Short and Strodtbeck (1965) who evidenced the pressures to deviance conferred by working class gang membership.

Taken together, this body of work suggested that criminal conduct was much more susceptible to variations in opportunity and to transitory pressures and inducements than conventional "dispositional" theories allowed. It was also becoming clear from interviews with residential burglars (Scarr, 1973; Reppetto, 1974; Brantingham and Brantingham, 1975; and Waller and Okihiro, 1979) that the avoidance of risk and effort plays a large part in target selection decisions. This dynamic view of crime provided a more satisfactory basis for situational prevention and led to the formulation of a simple "choice" model (Clarke, 1977; 1980). This required information not only about the offender's background and current circumstances, but also about the offender's (i) immediate motives and intentions, (ii) moods and feelings, (iii) moral judgments regarding the act in question, (iv) perception of criminal opportunities and ability to take advantage of them or create them, and (v) assessment of the risks of being caught as well as of the likely consequences.

This model, dubbed "situational control theory" by Downes and Rock (1982), was subsequently developed into the rational choice perspective on crime (see below), but it served initially to deflect criminological criticism of the atheoretical nature of situational prevention and, more importantly, to guide thinking about practical ways of reducing opportunities for crime.

### ***Defensible Space, CPTED and Problem-Oriented Policing***

While the concept of situational prevention was British in origin, its development was soon influenced by two independent (Jeffery, 1977), but nonetheless related, strands of policy research in the United States. These involved the concepts of "defensible space" (Newman, 1972) and "crime prevention through environmental design" or CPTED (Jeffery, 1971), both of which had preceded situational prevention, but, because of the trans-Atlantic delay in the dissemination of ideas, had not been the stimulus to its development.

Oscar Newman's "defensible space" ideas represented a brilliant attempt to use architectural form to rescue public housing in the United States from the depredations of crime. Newman, an architect, believed that the design of public housing developments discouraged residents from taking responsibility for public areas and from exercising their normal "territorial" instincts to exclude predatory offenders. In particular, he criticized the large scale of the buildings which made it impossible for residents to recognize strangers, the multitude of unsupervised access points that made it easy for offenders to enter projects and to escape after committing crime, the location of projects in high crime areas, and their

stark appearance which contributed to the stigma attaching to them. Newman supported these criticisms with statistical analyses of crime in public housing. He also provided a wealth of detailed design suggestions for creating "defensible space" through reducing anonymity, increasing surveillance and reducing escape routes for offenders.

"Defensible space" has sometimes been described as merely an extension of Jane Jacobs' (1961) ideas about the relationship between crime and the layout of streets and land use in American cities. As noted by Coleman (1985), however, this fails to do justice to Newman's unique contribution. He was focused upon buildings and architecture rather than urban planning, he moved beyond description to undertake quantitative analyses of the relation between specific design features and crime, and he was deeply involved in implementing change through the introduction of design modifications in housing developments. Despite the theoretical and methodological criticisms made of his work (see Mayhew, 1979, for a review), Newman's ideas have greatly influenced the design of public housing all over the world (Coleman, 1985). In particular, they have helped to rid many cities of high rise public housing blocks. With regard to the present discussion, they also stimulated efforts by the Home Office researchers engaged on situational prevention to undertake some early tests of "defensible space" notions in a British context (Wilson, 1978; Mayhew *et al.* 1979).<sup>1</sup>

In addition to Jane Jacobs, other influences on Newman included architectural ideas about the relation between environment and behavior and ethological writings on "territoriality" by authors such as Ardrey (1966). This mix of ideas was rather different from that giving rise to C. Ray Jeffery's (1971) concept of "crime prevention through environmental design." Jeffery claimed that the failures of the criminal justice system (in terms of limited reformative capacity, cruelty and inequity) stemmed from a flawed model of crime, in which "... the genetic basis of behavior is denied and... the environments in which crimes occur are ignored" (Jeffery, 1977: 10). Drawing upon a "biosocial theory of learning," he argued that punishment and treatment philosophies had to be abandoned in favor of a preventive approach which took due account of both genetic predisposition and the physical environment.

American criminology has been unreceptive to genetic explanations of behavior and Jeffery's general theory of criminal behavior has enjoyed less success than his concept of CPTED. Encompassing a broader set of techniques than "defensible space" and extending beyond the residential context, CPTED was adopted by the Westinghouse Corporation as the more suitable designation for its ambitious program of research to extend the defensible space concept to school and commercial sites. Unfortunately, this research produced disappointingly meager results — perhaps because "territorial" behavior is less natural outside residential settings (Jeffery, 1977: 45) — and government and research interest in CPTED has lagged in America in the 1980s and 1990s. Nevertheless, CPTED has enjoyed much success at a practical training level among police, due largely to the work of Tim Crowe and his associates (Crowe, 1991, Crowe and Zahm, 1994). Jeffrey's ideas also provided encouragement to the Home Office team and have been developed in empirical projects undertaken by some of his former students, including Patricia and Paul Brantingham and Ronald Hunter whose work is represented among the case studies included in this book.

"Problem-oriented policing" (Goldstein, 1979) constituted a somewhat later influence on the development of situational prevention. Goldstein argued that the route to greater

operational effectiveness for the police was not through improvements in organization and management, but through the detailed analysis of the everyday problems they handle and the devising of tailor-made solutions. This process requires "identifying these problems in more precise terms, researching each problem, documenting the nature of the current police response, assessing its adequacy and the adequacy of existing authority and resources, engaging in a broad exploration of alternatives to present responses, weighing the merits of these alternatives, and choosing from among them" (Goldstein, 1979: 236).

This formulation of problem-oriented policing — captured in the four-stage SARA model, Scanning, Analysis, Response and Assessment — reflects the same action research paradigm underpinning situational prevention (cf. Goldstein, 1990:103; Hope, 1994; Clarke, 1997). Nevertheless, some important differences exist between the concepts. In particular, problem-oriented policing is not exclusively focused on crime and is primarily a police management approach; situational prevention, on the other hand, is a crime control approach that can be utilized within any organizational or management structure and is open, not just to the police, but to whoever can muster the resources to tackle the problem in hand.

With respect to crime control, therefore, situational prevention represents a broader approach than problem-oriented policing. Because it encompasses the entire range of environments (and objects) involved in crime and because it encompasses legal and management as well as design solutions, situational prevention is also broader than CPTED (which tends to be focused on design of the built environment). For example, server intervention programs to control drunken driving and the provision of "call trace" facilities to private telephone subscribers as a deterrent to obscene phone calling would more readily fall under the definition of situational, than CPTED measures.

### ***The Rational Choice Perspective***

The earlier "choice" model formulated to guide situational prevention efforts has more recently been developed into a "rational choice" perspective on crime (Clarke and Cornish, 1985; Cornish and Clarke, 1986). This borrows concepts from economic theories of crime (e.g. Becker, 1968), but seeks to avoid some of the criticisms made of these theories, including that: (i) economic models mostly ignore rewards of crime that cannot easily be translated into cash equivalents; (ii) economic theories have not been sensitive to the great variety of behaviors falling under the general label of crime, with their variety of costs and benefits, and instead have tended to lump them together as a single variable in their equations; (iii) the formal mathematical modeling of criminal choices in economic theories often demands data that are unavailable or can only be pressed into service by making unrealistic assumptions about what they represent; and, finally, (iv) the image in economic theory of the self-maximizing decision maker, carefully calculating his or her advantage, does not fit the opportunistic and reckless nature of much crime (Clarke and Felson, 1993).

Under the new formulation, relationships between concepts were expressed, not in mathematical terms as was the case in Becker's normative model, but in the form of "decision" diagrams (Clarke and Cornish, 1985; Cornish and Clarke, 1986). Concepts were adapted from the other disciplines involved in the analysis of criminal decision making, as well as economics, to give greater weight to non-instrumental motives for crime and the "limited" or "bounded" nature of the rational processes involved. It was assumed, in other words, that crime is purposive behavior designed to meet the offender's commonplace

needs for such things as money, status, sex and excitement, and that meeting these needs involves the making of (sometimes quite rudimentary) decisions and choices, constrained as these are by limits of time and ability and the availability of relevant information.

A second important new premise was that a decision-making approach to crime requires that a fundamental distinction be made between criminal involvement and criminal events (a distinction paralleling that between criminality and crime). Criminal involvement refers to the processes through which individuals choose (i) to become initially involved in particular forms of crime, (ii) to continue, and (iii) to desist. The decision process at each of these stages is influenced by a different set of factors and needs to be separately modeled. In the same way, the decision processes involved in the commission of a particular crime (i.e. the criminal event) are dependent upon their own special categories of information. Involvement decisions are characteristically multistage and extend over substantial periods of time. Event decisions, on the other hand, are frequently shorter processes, utilizing more circumscribed information largely relating to immediate circumstances and situations.

Finally, and this is of special importance for situational prevention, it was recognized that the decision processes and information utilized could vary greatly among offenses. To ignore these differences, and the situational contingencies associated with them, may be to reduce significantly the scope for intervention.

Cornish and Clarke's formulation of the rational choice perspective has been characterized by Opp (1997) as a "wide" model compared with the "narrow" economic formulation. This wide model was primarily developed to assist thinking about situational prevention, but it was not intended to be limited to this role. Indeed, Cornish (1993) has argued that many features of the rational choice perspective make it particularly suitable to serve as a criminological "metatheory" with a broad role in the explanation of a variety of criminological phenomena.

### *Environmental Criminology, Routine Activities and Lifestyles*

Rational choice premises have generally been supported by recent studies in which offenders have been interviewed about motives, methods and target choices (Cromwell, 1996). The offenders concerned have included burglars (e.g. Walsh, 1980; Maguire, 1982; Bennett and Wright, 1984; Nee and Taylor 1988; Cromwell *et al*, 1991; Biron and Ladouceur, 1991; Wright and Decker, 1994; Wiersma, 1996), shoplifters (Walsh, 1978; Carroll and Weaver, 1986), car thieves (Light *et al*, 1993; McCullough *et al*, 1990; Spencer, 1992), muggers (Lejeune, 1977; Feeney, 1986) bank and commercial robbers (New South Wales Bureau of Crime Statistics and Research, 1987; Normandeau and Gabor, 1987; Kube, 1988; Nugent *et al*, 1989) and offenders using violence (Indermaur, 1996; Morrison and O'Donnell, 1996).

These studies of offender decision making constitute one of two major analytic paths followed in the past decade by "environmental criminology" (Brantingham and Brantingham, 1991). The other path has involved "objective analysis of the spatial and temporal variation in crime patterns in order to discover aggregate factors influencing the patterns" (Brantingham and Brantingham, 1991: 239). When such analyses involve aggregate crime rates or "macro" level data for countries or states, they rarely produce findings with preventive implications. "Micro" level analyses, on the other hand, of specific categories of crime occurring in specific kinds of buildings or sites are generally the most productive

in preventive terms (Kennedy, 1990).

Analyses at an intermediary "meso" level can also lead to useful preventive suggestions as shown by Poyner and Webb's (1991) study mentioned above of domestic burglary in two British communities. This study is also illustrative of research on the criminal's "journey to work" undertaken, among others, by Brantingham and Brantingham (1975), Maguire (1982) and Rengert and Wasilchick (1985). Among the findings of these studies are that the risks of commercial robbery may be increased by being located close to a main road and those of domestic burglary by being located on the outskirts of an affluent area. In both cases, the explanation is that the offender's target search time is thereby reduced.

Research on the criminal's journey to work is conceptually related to another body of criminological work — routine activity theory — which has also contributed to the theoretical base of situational prevention. The routine activity approach stated three minimal elements for direct-contact predatory crime: a likely offender, a suitable target, and the absence of a capable guardian against crime (Cohen and Felson, 1979). It avoids speculation about the source of the offender's motivation, which distinguishes it immediately from most other criminological theories. Instead, it focuses upon the convergence in space and time of the three elements of crime, that is to say upon the conditions favoring the occurrence of a criminal event, rather than the development of a criminal disposition. This reflects its intellectual roots in the human ecology of Amos Hawley (1950), who recognized that the timing of different activities by hour of day and day of week are important for the understanding of human society. These points are also central to the routine activity approach, which is focused upon changes from moment to moment and hour to hour in where people are, what they are doing, and what happens to them as a result (Clarke and Felson, 1993; Felson, 1994a). In support of their approach, Cohen and Felson (1979) sought to demonstrate that increases in residential burglary in the United States between 1960 and 1970 could largely be explained by changes in "routine activities" such as the increasing proportion of empty homes in the day (due to more single person households and greater female participation in the labor force) and the increased portability of televisions and other electrical goods.

Cohen and Felson's analysis also illustrates the relationship between routine activity theory and the victimological work on "lifestyles," stimulated by the flood of National Crime Survey data first released in the 1970s (Hindelang *et al.*, 1978). One of the tenets of "lifestyle" theory is that the differential risks of victimization are partly a function of differential exposure to offenders (Fattah, 1993). This exposure varies not only with the sociodemographic characteristics of the victim (age, race, place of residence, etc.), but also with the victim's lifestyle. A person's work and leisure activities that increase exposure to potential offenders (such as alcohol consumption in public places or late-night use of public transport) increase the risks of victimization. The implication of this is that risks might be reduced by modifying patterns of activity. A further important finding of victimological research, the implications of which are being explored in a series of recent studies by Ken Pease and colleagues (for a review, see Farrell and Pease, 1993), is that some people and targets are repeatedly subject to victimization and might therefore be prime candidates for preventive attention (see *Case Study #75*). A similar point has been made by Sherman *et al.* (1989) in relation to the "hot spots" of crime, places that are the source of repeated calls for assistance to the police.

Lifestyle and routine activity theories have both made opportunity a respectable topic

of research in criminology and have helped attract serious scholarly interest to situational prevention. Both theories are still evolving and Felson himself has made some attempts to expand the scope of routine activity theory. He has defined minimal elements for some categories of crime other than direct-contact predatory offenses (Felson, 1992) and, in order to accommodate social control theory (Hirschi, 1969), has proposed a fourth minimal element for predatory crimes, "the intimate handler", or someone who knows the likely offender well-enough to afford a substantial brake on the latter's activities (Felson, 1986). Clarke (1992) has argued that the contribution of routine activity theory to crime prevention could be enhanced by adding a fifth element which he refers to as "crime facilitators." These are such things as automobiles, credit cards and weapons that comprise the essential tools for particular forms of crime.

### ***The Opportunity Structure for Crime***

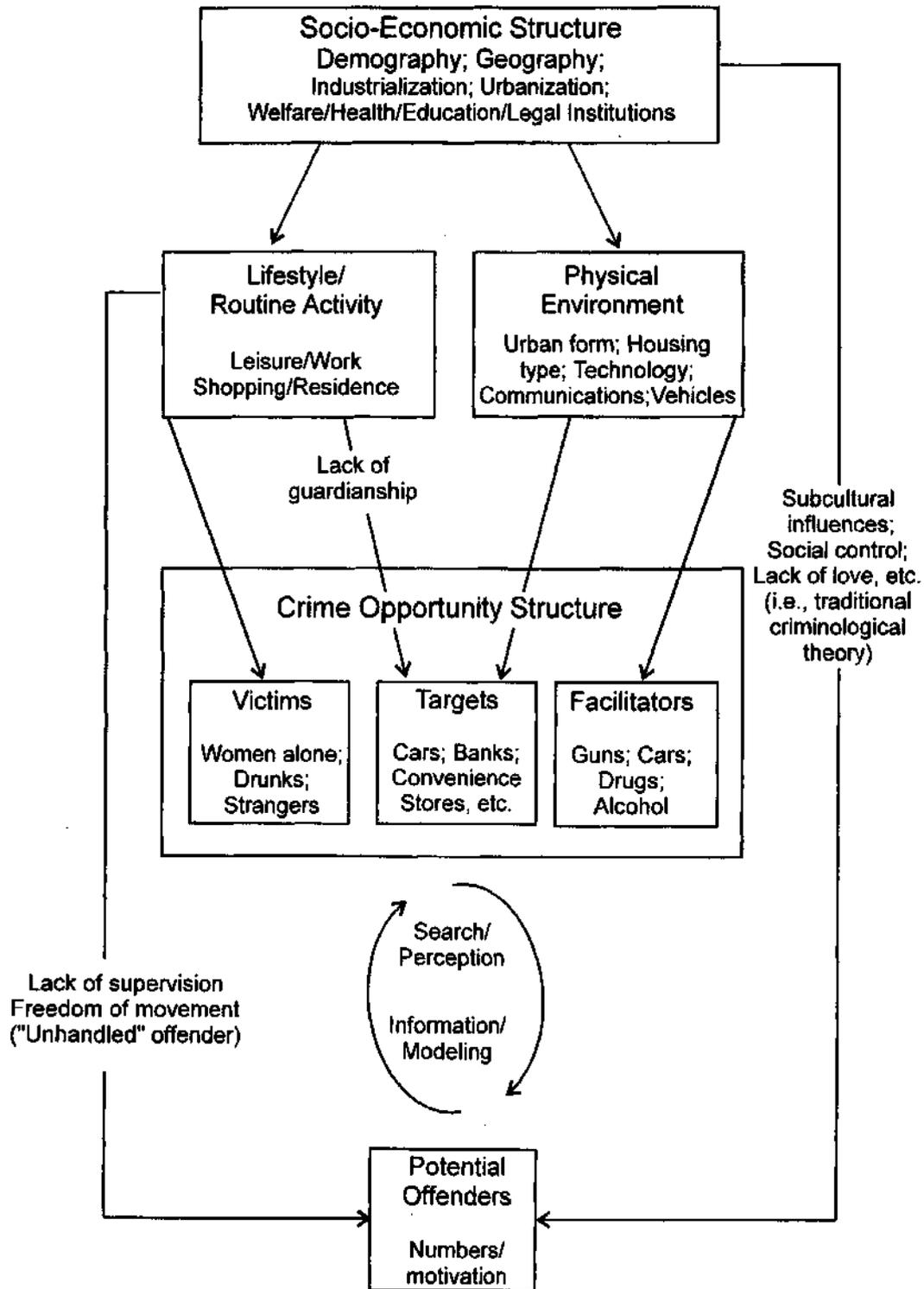
Environmental criminology, the rational choice perspective and routine activity and lifestyle theories have all helped to strengthen situational prevention in different ways, reflecting their different origins and the purposes for which they were developed. By interviews with offenders and analysis of crime patterns, environmental criminology has provided rich information about the motives and methods of offenders, which has been valuable in thinking about counter measures. The rational choice perspective has provided a framework under which to organize such information so that individual studies produce more general benefits. As will be seen below, it has also assisted analysis of displacement. Lifestyle theory has focused attention on what victims might do to reduce their risks of crime. And routine activity theory has served to extend preventive options by directing attention to features of the three essential elements of crime and their convergence. For example, the idea of convergence has led to the suggestion that "deflecting offenders" be recognized as a distinct technique of situational prevention (Clarke, 1992).

Cusson (1986) has argued that the differences among the various theoretical approaches may turn out to be mainly of historical interest and that a synthesis is inevitable and desirable. The model of the opportunity structure for crime presented in Figure 1 represents one such attempt at integration.

Under this model, which includes the dispositional variables of traditional criminology as well as the situational ones of the newer theories, there are three components of the *criminal opportunity structure*. These are *targets* (cars, convenience stores, ATM machines, etc.), *victims* (e.g. women alone, drunks, strangers) and *crime facilitators*. These latter include tools, such as guns and cars, as well as disinhibitors such as alcohol or other drugs.<sup>2</sup>

The supply of targets and their nature is a function of (i) the *physical environment*, including the layout of cities, the kinds of housing, technology and communications, transportation and retailing systems, the numbers of vehicles and the supply of drugs and alcohol, and (ii) the *lifestyles and routine activities* of the population, including patterns of leisure, work, residence and shopping; these patterns either hinder or facilitate guardianship. The physical environment also determines the supply of facilitators, while lifestyles and routine activities play a large part in supplying the victims of personal and sexual attacks. Physical environment and lifestyles and routine activities are themselves determined by the broader *socio-economic structure* of society, including demography, geography, urbanization and industrialization, health and educational policy, and legal and

FIGURE 1  
THE OPPORTUNITY STRUCTURE FOR CRIME



Source: Clarke (1995)

political institutions. The numbers of *potential offenders* and their motives is also partly determined by the socio-economic structure of society through many of the mechanisms (alienation, subcultural influence, neglect and lack of love, etc.) identified by traditional criminology, and partly by lifestyle and routine activities which impact upon the nature of social control afforded by "intimate handlers" and in other ways.

The opportunity structure is not simply a physical entity, defined at any one point in time by the nature of the physical environment and the routine activities of the population. Rather, a complex interplay between potential offenders and the supply of victims, targets and facilitators determines the scale and nature of opportunities for crime. Potential offenders learn about criminal opportunities from their peers, the media and their own observation, but they are differentially sensitized to this information as well as being differentially motivated to seek out and create opportunities. Thus, offender perceptions and judgments about risks, effort and rewards play an important part in defining the opportunity structure. These judgments also play a determining role at the subsequent stage of crime commission, where Figure 1 stops short.

Before moving from the theoretical background of situational crime prevention to its other components, some questions about the scope and reach of situational prevention arising from the model of the opportunity structure should be addressed. The first is that, if everything seems to flow from the socio-economic structure, should not preventive effort be focused at that level? Could not large scale reductions in a wide range of crimes be achieved by tackling the disposition to offend through improved welfare and educational programs? Would this not be more efficient than undertaking the vast number of small-scale efforts to address highly specific crime problems implied by the situational focus?

One answer to these questions is that "social" crime prevention is already focused at the socio-economic level and that the opportunity structure requires attention in its own right. However, Morris and Hawkins (1970) and Wilson (1975) have noted that we do not know how to bring about some of the needed social changes, such as making parents love their children more. As for better welfare and education, these may be seen as desirable but often as demanding resources that society cannot afford. Finally, when Sweden and some other European countries enhanced welfare and achieved more equitable income distribution, this was followed not by reductions in crime but by increases (Smith, 1995).

A second question concerns deterrence and is as follows: Rather than attempting to manipulate the opportunity structure (with the attendant costs and inconvenience of this strategy), might it not be more efficient simply to raise the stakes of offending through heavier punishments? In fact, interviews with offenders have shown that they pay much closer attention to the immediate chances of getting caught than to the nature of the punishment they might receive later. Rather than increasing punishment, it is therefore more efficient to make the offender more fearful of being caught, and one component of situational prevention does indeed consist of increasing the risks of being caught through a process that Cusson (1993) refers to as "situational deterrence."

A final set of questions concerns the interplay between the objective reality of the opportunity structure and the way this is perceived by potential offenders. How do offenders learn about criminal opportunities and what factors come into play when they make decisions about which ones to pursue? What proportion of crimes are the result of opportunities seized, and what proportion of ones that are sought or created (Maguire, 1980; Bennett and Wright, 1984). At issue here is the question of whether opportunities for

crime really are in infinite supply as some have argued. If so, this has serious implications for a strategy advocating their reduction. What matter the few reductions that can be achieved in criminal opportunities if these are infinite?

Consideration of the realities of crime helps provide an answer. While it may be true in theory that every dwelling and automobile provides not just one opportunity for crime, but, if considered over time, a set of almost endless opportunities, this ignores the fact that households and automobiles are afforded substantial guardianship for much of the time (Clarke, 1984). Even when unguarded, they may in actuality provide few rewards for crime. The average household contains only a few portable goods that can be converted into cash and there are limits to the number of stolen VCRs and television sets that the offender can store. It is also unclear how many such "hot" items can be off-loaded onto the market without provoking a determined response from law enforcement. Clarification of these issues needs to be sought in more research of the kind recently published by Cromwell *et al.* (1991), in which they undertook detailed interviews with residential burglars about their working methods.

### ***The Action Research Methodology***

The standard methodology for a situational project, situational prevention's second component, is a version of the action research model in which researchers and practitioners work together to analyze and define the problem, to identify and try out possible solutions, to evaluate the results and, if necessary, to repeat the cycle until success is achieved (Lewin, 1947). The influence of the action research paradigm can be seen in the following specification of the five stages of a situational prevention project (Gladstone, 1980):

1. collection of data about the nature and dimensions of the specific crime problem;
2. analysis of the situational conditions that permit or facilitate the commission of the crimes in question;
3. systematic study of possible means of blocking opportunities for these particular crimes, including analysis of costs;
4. implementation of the most promising, feasible and economic measures;
5. monitoring of results and dissemination of experience.

As mentioned, this is essentially the same problem-solving methodology used in problem-oriented policing as well as in many other forms of social intervention, and because of its extensive pedigree has required little modification for use in situational crime prevention. However, it represents an ideal not always followed in practice.

### ***Sixteen Opportunity-Reducing Techniques***

Unlike the action research methodology which has seen little modification, the classification of opportunity-reducing techniques, the third component of situational prevention, is constantly undergoing change. This is made necessary by developments (i) in theory which suggest new ways of reducing opportunities, (ii) in practice as new forms of crime are addressed by situational prevention, and (iii) in technology which opens up new vistas for prevention, just as it does for crime. The fact that the classification of techniques is constantly being refined is evidence of the vitality of the situational approach and, indeed, these re-classifications help further to stimulate its development by calling attention to new forms of opportunity-reduction.

In the first edition of this book a classification of twelve opportunity-reducing techniques was introduced, itself a modification of an earlier classification proposed by Hough *et al.* (1980). In introducing the new classification, it was noted that the techniques served three purposes, implicit in the rational choice assumptions of situational prevention, of increasing the risks, increasing the difficulties, and reducing the rewards of crime.

This classification has recently been modified by Clarke and Homel (1997) to encompass a fourth purpose of situational prevention implicit in rational choice theory, which is to increase shame and guilt or, more particularly, to "remove excuses" for crime.<sup>3</sup> This reflects the fact that situational measures, having first been used to prevent a variety of "street" and predatory crimes, have more recently also been applied against income tax evasion, traffic offenses (including drunk driving), sexual harassment and theft of employers' property, which are as much the province of "ordinary citizens" as of "hardened offenders" (see Gabor's, 1994, book *Everybody Does It!* for a review of these crimes, and the earlier seminal paper by Ross, 1960, on traffic offenses as "folk crimes"). Opportunities for these offenses arise in the course of everyday life for most people and do not have to be sought in the same way as opportunities for autotheft or burglary. The very frequency of these opportunities, together with the generally higher social status of offenders, may contribute to the relative lack of moral opprobrium attached to taking advantage of them. This lack of condemnation and the relative ease of commission suggest that, rather than by increasing the risks of detection, these offenses might more effectively be prevented by increasing the incentives or pressures to comply with the law (Sparrow, 1994).

The addition of this fourth rational choice category represents more explicit recognition of the fact that offenders make judgments about the morality of their own behavior and that they frequently rationalize their conduct to "neutralize" what would otherwise be incapacitating feelings of guilt or shame through such excuses as, "He deserved it," "I was just borrowing it" and "I only slapped her." These rationalizations may be especially important for ordinary people responding to everyday temptations to break the law. Though overlooked in the classification of situational techniques in the first edition of this book, the role of rationalizations was clearly identified in the original formulation of the rational choice perspective on which it was based (Clarke and Cornish, 1985; Cornish and Clarke, 1986).

Rationalizations are also given a central role by two other criminological theories, Sykes and Matza's (1957) social deviance theory of "techniques of neutralization" and Bandura's (1976) social learning theory of violence, which makes use of the concept of "self-exoneration" (Wortley, 1986). The parallels between these concepts are remarkable (though Bandura appears to have been unaware of Sykes and Matza's earlier work) and this degree of congruence gives further reason to think that removing excuses or rationalizations may be an important preventive strategy.

Clarke and Homel's (1997) modification of the classification in the first edition of this book, left eight of the original categories untouched, modified the remaining four and added four new ones for a total of sixteen techniques (see Table 1).

In proposing the new classification, Clarke and Homel recognized a specific danger of including the manipulation of shame and guilt as a purpose of situational prevention. This is the danger of entangling situational prevention in attempts to bring about long-term changes in dispositions to offend — a fundamentally different approach to crime prevention (Newman, 1997). They justified their course by pointing out that a choice has to be

made between maintaining the clarity of the situational approach but limiting its application, or extending its reach and complicating its definition. So long as the measures to induce guilt or shame are focused on highly specific categories of offending and are delivered at the point when criminal decisions are being made, they believe that the danger can be avoided of confusing the nature of situational prevention. For example, the message "Shoplifting is stealing" is much more likely to affect the situational calculus, and would thus qualify as a situational measure, when displayed in high risk stores than when displayed on school notice boards where it is intended to reduce the disposition to theft.

Before describing the sixteen techniques, and presenting examples of each, it should be noted that there is some unavoidable overlap among categories. For example, measures that increase the effort demanded for crime and delay the offender will also increase the risks of apprehension. This means that there is sometimes difficulty in deciding where a particular measure best fits into the classification in Table 1, and indeed some measures can serve more than one purpose.

1. *Target hardening.* An obvious, often highly effective way of reducing criminal opportunities is to obstruct the vandal or the thief by physical barriers through the use of locks, safes, screens or reinforced materials. Changes in design, including a slug rejecter device substantially reduced the use of slugs in New York parking meters (Decker, 1972)<sup>4</sup> and, more recently, in the ticket machines of the London Underground (Clarke *et al.*, 1994). Transparent screens to shield the bus driver significantly reduced assaults on one transit system (Poyner *et al.*, 1988); anti-bandit screens on post office counters in London in the 1980s was conservatively estimated by Ekblom (1988b) to have cut robberies by 40 percent; and the installation of fixed and "pop-up" screens is believed to have been an important element in reducing over-the-counter robberies in Australian banks (Clarke *et al.*, 1991). A strengthened coin box has been identified in several studies as a significant factor in reducing incidents of theft and damage to public telephones in Britain and Australia (Wilson, 1990; Challinger, 1991; Bridgeman, 1997). *Case Study #7* in this volume shows that the introduction of steering locks on both new and old cars in Germany in 1963 produced a substantial decline in the rate of car theft for the country that has persisted to this day and that these locks have conferred similar benefits in Britain and America (Webb, 1994).

2. *Access control* Access control refers to measures intended to exclude potential offenders from places such as offices, factories and apartment blocks. The portcullises, moats and drawbridges of medieval castles suggest its preventive pedigree may be as lengthy as that of target hardening. It is also a central component of defensible space, arguably the start of scientific interest in situational prevention. A sophisticated form of access control lies in the use of electronic personal identification numbers (PINs) that are needed to gain access to computer systems and bank accounts. Poyner and Webb (1987b) found that a combination of access controls introduced on a South London public housing estate, including entry phones, fencing around apartment blocks and electronic access to the parking garage, achieved a significant reduction in vandalism and theft. They also found that the introduction of a reception desk on the ground floor of a tower block led to a marked reduction in vandalism, graffiti and other incivilities. *Case Study #2* shows that the installation of entryphones, and the demolition of walkways linking buildings, significantly reduced robberies and purse-snatchings at Lisson Green, another London public housing estate.

TABLE 1  
SIXTEEN OPPORTUNITY-REDUCING TECHNIQUES

Increasing Perceived Effort	Increasing Perceived Risks	Reducing Anticipated Rewards	Removing Excuses
<p><i>1. Target hardening</i></p> <p>Slug rejecter device Steering locks Bandit screens</p>	<p><i>5. Entry/exit screening</i></p> <p>Automatic ticket gates Baggage screening Merchandise tags</p>	<p><i>9. Target removal</i></p> <p>Removable car radio Women's refuges Phonecard</p>	<p><i>13. Rule setting</i></p> <p>Customs declaration Harassment codes Hotel registration</p>
<p><i>2. Access control</i></p> <p>Parking lot barriers Fenced yards Entry phones</p>	<p><i>6. Formal surveillance</i></p> <p>Red light cameras Burglar alarms Security guards</p>	<p><i>10. Identifying property</i></p> <p>Property marking Vehicle licensing Cattle branding</p>	<p><i>14. Stimulating conscience</i></p> <p>Roadside speedometers "Shoplifting is stealing" "Idiots drink and drive"</p>
<p><i>3. Deflecting offenders</i></p> <p>Bus stop placement Tavern location Street closures</p>	<p><i>7. Surveillance by employees</i></p> <p>Pay phone location Park attendants CCTV systems</p>	<p><i>11. Reducing temptation</i></p> <p>Gender-neutral listings Off-street parking Rapid repair</p>	<p><i>15. Controlling disinhibitors</i></p> <p>Drinking-age laws Ignition interlock V-chip</p>
<p><i>4. Controlling facilitators</i></p> <p>Credit card photo Gun controls Caller-ID</p>	<p><i>8. Natural surveillance</i></p> <p>Defensible space Street lighting Cab driver I.D.</p>	<p><i>12. Denying benefits</i></p> <p>Ink merchandise tags PIN for car radios Graffiti cleaning</p>	<p><i>16. Facilitating compliance</i></p> <p>Easy library checkout Public lavatories Trash bins</p>

Source: Adapted from Clarke and Homel (1997)

*3. Deflecting offenders.* At soccer matches in Britain, rival groups of fans have been segregated in the stadium to reduce fighting and their arrival and departure has been scheduled to avoid the periods of waiting around that promote trouble (Clarke, 1983). Scheduling the last bus to leave immediately after pub closing time, is intended to interfere with another of Britain's less admirable traditions, the closing time brawl. Hope (1985) has suggested that crowds of drunken young people on the streets at closing time could also be reduced by avoiding the concentration of licensed premises in particular parts of the city. Bell and Burke (1989) show that the leasing of a downtown parking lot in Arlington, Texas, relieved severe congestion on weekend nights in nearby streets, and associated crime

problems, by providing a venue for teenage cruising. These are all examples of "deflecting offenders" away from crime targets, a situational technique suggested by routine activity theory. Further examples are provided by case studies in this volume. Thus, in *Case Study #4*, Poyner and Webb (1987a) show that thefts from shopping bags at markets in Birmingham, England, were substantially reduced by reducing congestion around the stalls, which increased the difficulty of pickpocketing and other "stealth" thefts. Matthews (1990) shows that a road closure scheme to deflect cruising "Johns" contributed to the rehabilitation of a red light district in a North London suburb (*Case Study #3*).

4. *Controlling facilitators*. Saloons in the Wild West routinely required customers to surrender their weapons on entry because of the risk of drunken gun fights. In more recent times, the manufacture of "less lethal weapons" in the form of guns that shoot wax bullets, electricity or tranquilizers has been advocated (Hemenway and Weil, 1990). The Scottish Council on Crime (1975) suggested that in some pubs beer should be served in plastic mugs to prevent their use as weapons, and recent studies in Britain of the injury potential of different kinds of broken glass have led to the recommendation that toughened glass be used for beer glasses (Shepherd and Brickley, 1992). Controls on a range of other crime facilitators have been proposed including checks and credit cards (which facilitate fraud) and telephones (which may facilitate drug dealing, frauds and sexual harassment). To reduce drug dealing, pay phones have been removed from places where drug dealers congregate or have been altered to make them more difficult to use for dealing (Natarajan *et al.*, 1996). A new computerized phone system in Rikers Island jails substantially reduced illicit phone calls by inmates and also had the unexpected benefit of reducing fights over access to the phones (La Vigne, 1994). Two case studies included in this volume illustrate the value of other controls on telephones. In *Case Study #5*, Clarke (1990) showed that the introduction in New Jersey of Caller-ID, a service which allows the person answering the phone to read the number calling, resulted in a reduction of about 25 percent in obscene and annoying telephone calls. Bichler and Clarke (1996) showed that re-programming pay phones at the Port Authority Bus Terminal in Manhattan prevented illicit access to toll lines and wiped out a multi-million dollar scam perpetrated by hustlers drawn to the building by the opportunities for fraud (*Case Study #6*). Finally, Knutsson and Kuhlhorn (1981) have shown that the introduction of identification procedures in Sweden produced a dramatic decline in the number of reported check frauds (*Case Study #7*).

5. *Entry/exit screening*. Entry screening differs from access control in that the purpose is less to exclude potential offenders than to increase the likelihood of detecting those not in conformity with entry requirements. These requirements may relate to prohibited goods and objects or, alternatively, to possession of tickets and documents. Exit screens, on the other hand, serve primarily to deter theft by detecting objects that should not be removed from the protected area, such as items not paid for at a shop. Developments in electronics have resulted in the increasing use of these situational techniques in retailing, as evidenced by the spread of merchandise tagging, bar-coding and "electronic point of sales" systems (Hope, 1991). In *Case Study #8*, DiLonardo (1996) shows that electronic merchandise tags on clothing can achieve significant reductions in shoplifting of the order of 35-75 percent in American stores. Similar, though not as strong, effects were reported in Britain (Bamfield, 1994). Scherdin (1986) reports that the installation of book detection screens, as found in thousands of libraries, reduced thefts of both books and audiovisual materials at one University of Wisconsin library by more than 80 percent. The installation of

automatic ticket gates on the 63 central zone stations of the London Underground resulted in a two-thirds reduction of fare evasion throughout the system (Clarke, 1993). In a "low tech" example of entry screening, the redesign of tickets to facilitate their inspection on Vancouver ferries produced a two-thirds reduction in fare evasion (DesChamps *et al.*, 1991). Finally, the most famous example of this technique concerns the introduction of baggage and passenger screening at most major airports in the world during the early 1970s. This contributed to a precipitate reduction in the number of airline hijackings from about 70 per year to about 15 (Wilkinson, 1977, 1986; Landes, 1978).

6. *Formal surveillance.* Formal surveillance is provided by police, security guards and store detectives, whose main function is to furnish a deterrent threat to potential offenders. One example of the successful useful use of security personnel is provided by *Case Study #10* which describes a bike patrol used to curb auto thefts from a commuter parking lot in Vancouver. The surveillance afforded by security personnel may be enhanced by electronic hardware, for example by burglar alarms and closed circuit television (CCTV). In their study of an affluent suburban community close to Philadelphia, Hakim *et al.* (1995) concluded that widespread ownership of burglar alarms reduced police costs by lowering burglary rates for the community at large. One element of "Biting Back," the preventive program focused on repeat victims of burglary in a English town, included the temporary installation of silent alarms in victims' homes (*Case Study #15*). In Australia, Homel (1993) reported that the introduction in 1982 of random breath testing (RBT) in New South Wales cut alcohol-related fatal crashes by more than a third relative to the previous three years, declines that persisted as a result of a continued high level of RBT enforcement. Also in Australia, Bourne and Cooke (1993) show that the widespread deployment of photo radar in the State of Victoria was the major factor in substantially reduced levels of speeding in 1991/2, contributing to an overall decline of 45% in traffic fatalities. An experiment with "red light" cameras in Scotland was also found to be successful in preventing motorists "running the red" (Scottish Office Central Research Unit, 1995)<sup>5</sup>. Several studies in Britain, two reproduced in this volume, have found CCTV cameras to be effective in reducing crime. When CCTV cameras were installed for the use of security personnel at a university's parking lots, Poyner (1991) found a substantial reduction in thefts (*Case Study #11*). Appreciable reductions in a variety of crimes have been reported by Brown (1996) following installation of CCTV for police use in the centers of three British cities (*Case Study #12*). Not all the successful examples of formal surveillance involve the use of technology. For example, rates of vandalism, assault and fare dodging on subways and trams in three Dutch cities were substantially reduced when 1,200 "VICs" were employed to serve as safety, information and control inspectors (*Case Study #9*). Masuda (1992) showed that systematic, daily counting by security personnel of items of high risk merchandise, such as VCRs and camcorders, resulted in declines of between 80-100% in thefts by employees at a large electronics merchandiser in New Jersey (*Case Study #13*). Lastly, ways of enhancing police surveillance by enlisting the help of the public are continually being expanded, including informant hotlines, "crime stopper" programs and "curfew decals" on automobiles, which indicate to patrolling police that the vehicle is not normally in use late at night (Clarke and Harris, 1992a).

7. *Surveillance by employees.* In addition to their primary function, some employees, particularly those dealing with the public, also perform a surveillance role by virtue of their position. These include a variety of "place managers" (Eck, 1995; Felson, 1995) such as

shop assistants, hotel doormen, park keepers, parking lot attendants and train conductors. All these employees assume some responsibility for monitoring conduct in their workplaces. Canadian research has shown that apartment blocks with doormen are less vulnerable to burglary (Waller and Okihiro, 1979). In Britain, less vandalism has been found on buses with conductors (Mayhew *et al.*, 1976) and on public housing estates with resident caretakers (Department of Environment, 1977). Public telephones in Britain which get some surveillance by employees, such as those in pubs or railway stations, also suffer fewer attacks (Markus, 1984). A two-thirds reduction in offenses at a parking lot in England followed the employment of attendants to cover high risks periods of the day (Laycock and Austin, 1992). Rewarding cashiers for detection of forged or stolen credit cards helped to reduce annual losses from credit card frauds by nearly \$1 million dollars at an electronics retailer in New Jersey (Masuda, 1993). Once again, CCTV surveillance has been found effective when these cameras are provided for employee use. Cameras installed for use of station staff produced substantial reductions in muggings and thefts at four high risk stations on the London Underground (Mayhew *et al.*, 1979). Vandalism of seats on a fleet of 80 double-deck buses in England was substantially reduced through the provision of CCTV for drivers, though only a few buses were equipped with the cameras (Poyner, 1988). Finally, in *Case Study #14*, Hunter and Jeffery (1992) report that ten out of fourteen studies they reviewed found that having two clerks on duty, especially at night, was an effective robbery prevention measure (see also Bellamy, 1996).

8. *Natural surveillance.* Householders may trim bushes at the front of their homes and banks may light the interior of their premises at night in attempting to capitalize upon the "natural" surveillance provided by people going about their everyday business. Enhancing natural surveillance is a prime objective of improved street lighting (Tien *et al.*, 1979; Ramsay, 1991a), of defensible space (Mayhew, 1979; Coleman, 1985), and of "neighborhood watch" (Bennett, 1990; Rosenbaum, 1988). Though results have not been uniformly positive, some successes in the use of all three measures have been reported. An "apartment watch" program combined with target hardening achieved an 82% reduction in reported burglaries in four apartment blocks in Ottawa (Meredith and Paquette, 1992). Cocoon neighborhood watch, whereby immediately surrounding homes were alerted after a burglary, was an element of the successful "Biting Back" scheme to reduce repeat burglaries described in *Case Study #15*. In his most recent publication, Oscar Newman (1996) reports some successes in reducing crime in public housing developments in the United States through application of defensible space principles. One component of a program that significantly reduced burglary on a commercial strip in Portland, Oregon, was improved lighting of the exterior of the stores (Griswold, 1984). Enhanced lighting in a public housing estate in Dudley, England, produced crime reductions with little evidence of displacement (*Case Study #16*). In one "low-tech" example, components of successful robbery prevention in convenience stores in Florida included an unobstructed view of the store's interior from outside and location of stores near evening commercial activity (Hunter and Jeffery, 1992). Finally, "How's my driving?" decals with 1-800 telephone numbers displayed on the backs of trucks, and cab driver I.D.'s displayed for passengers, facilitate natural surveillance of the behavior of both groups of drivers.

9. *Target removal.* A church in Northern Spain has recently installed a machine at its entrance that allows people to use their bank or credit cards to make donations. (In reporting this development, a local Spanish newspaper could not resist the headline "Through Visa

Toward God," *New York Times*, February 1, 1997, p.F2). The person making the donation has a receipt for tax purposes and the church may receive larger gifts. Since money is not being deposited, the church has also reduced its theft risk through "target removal." An earlier application of this same situational technique, quoted by Pease (1997), comes from the days of the Californian Gold Rush. Plagued by robberies of stage coaches, one mine started casting its silver into 400-pound cubes, about one foot on each side. These were simply too heavy for a robber, or even a gang of them, to carry off on horseback (Lingenfelter, 1986). Other examples of target removal come from attempts to deal with attacks on public telephones in Great Britain and Australia (Bridgeman, 1997). Because the kiosk itself (specially the glass) is more frequently vandalized than the phone, kiosks in high risk locations have been replaced by booths. In addition, the smaller, highly vulnerable, glass panes in earlier kiosks have been replaced by larger panes in more recent designs. A third pay phone example is provided by the introduction of the Phonecard, which by dispensing with the need for pay phones to store large sums of cash, has removed an important target for theft. A variety of cash reduction measures, including the use of safes with time locks, substantially reduced robberies of betting shops in Australia (Clarke and McGrath, 1990). Pease (1991) has shown that a package of measures to prevent repeat victimization of houses on a public housing estate in Britain, including the removal of gas and electric coin meters which were frequent targets for theft (Hill, 1986; Cooper, 1989), reduced burglaries on the estate from 526 in the year before intervention to 132 three years later. *Case Study #14*, shows that cash reduction has consistently been found to reduce the risks of convenience store robbery. Perhaps the best known example of cash reduction, however, concerns the introduction of exact fare systems and safes on buses, which dramatically reduced bus robberies in New York (Chaiken *et al.*, 1974) and in 18 other cities in the late 1960s (Stanford Research Institute, 1970). Finally, a successful "low tech" application of target removal that consisted of persuading in-patients to surrender their valuables for safekeeping, or not to bring them to the hospital, has been described by Moore (1987).

*10. Identifying property.* Writing one's name in a book is a simple form of property marking — a space is provided in this book for that purpose. The most developed programs of identifying property relate to vehicles. Registration of motor vehicles was required in some U.S. states from almost the beginning of the century and, subsequently, all vehicles sold in the United States were required to carry a unique Vehicle Identification Number (or VIN). More recently, the Motor Vehicle Theft Law Enforcement Act 1984 has mandated the marking of all major body parts of "high risk" automobiles with the VINs. One of the last U.S. states to require vehicle registration was Illinois in 1934, whereupon vehicle thefts declined from 28,000 in the previous year to about 13,000 (Hall, 1952). Although "operation identification" programs have had a checkered history in the United States (Zaharchuk and Lynch, 1977; Heller *et al.*, 1975), Laycock (1991) shows in *Case Study #17* that property marking undertaken in three small communities in Wales, combined with extensive media publicity, nearly halved the number of reported domestic burglaries.

*11. Reducing temptation.* In certain city streets it is unwise to wear gold chains or leave cars parked which are attractive to joyriders. (Throughout the 1980s, the Chevrolet Camaro constituted an American example of the latter, Clarke and Harris, 1992b). Some temptations are less obvious. For example, phone directories which are not gender-neutral might promote obscene phone-calls to women. It has also been found in extensive experimental

research that the mere presence of a weapon, such as a gun, can induce aggressive responses in some people. Known as the "weapons effect" (Berkowitz and LePage, 1967), this gives further support to gun control. The weapons effect barely enters the subjective world of potential offenders and James Wise (1982) has argued that this is also true of many inducements to vandalism, for example when the surface characteristics of a wall almost invite graffiti. Many of his suggestions for a "gentle deterrent" to vandalism consist of reducing such temptations. For example, he has suggested that the glass covering fire alarm handles should be mirrored because bad luck would follow its breaking. Another example of reducing temptation is "rapid repair" on the grounds that leaving damaged items unrepaired invites further attacks. Samdahl and Christensen (1985) provided support for this policy by demonstrating that picnic tables that had been scratched and carved were more than twice as likely to be damaged further than other tables. Zimbardo (1973) showed that a car left parked in poor condition in an inner city area rapidly attracted further depredation. Smith (1996) found that school boys in England who admitted recent similar vandalism acts, reported they would be more likely to damage fences or write on them when these already showed signs of vandalism and graffiti. Substantially reduced rates of crime and vandalism on the metropolitan railways of Victoria, Australia, were reported by Carr and Spring (1993) following the introduction of "Travel Safe," a program consisting of rapid repair of vandalism and graffiti as well as of more generally enhanced security. This advocacy of rapid repair and good maintenance has been taken a step further by Wilson and Kelling (1982) who have argued in their famous "broken windows" article that the failure to deal promptly with minor signs of decay in a community, such as panhandling or soliciting by prostitutes, can result in a quickly deteriorating situation as hardened offenders move into the area to exploit the break-down in control. Finally, in *Case Study #18*, Kuhlhorn shows how removing the temptation to understate income, by permitting income statements to be cross-checked by computer, reduced welfare frauds in Sweden.

12. *Denying benefits.* Related to reducing temptation, but conceptually distinct, is denying the benefits of crime to offenders. The recent development of security-coded car radios that require a thief to know the radio's PIN before it can be used in another vehicle constitutes an excellent example of this principle. Cars fitted with these radios have been found to have lower theft rates in studies in Australia (NRMA Insurance Ltd. 1990) and in Germany and the United States (Braga and Clarke, 1994). These successes suggest that this principle might usefully be extended to VCR's and TV's so as to reduce the rewards of burglary. A further example of the principle in action is provided by "ink tags," which are designed to deny shoplifters the benefits of stealing. If tampered with, these tags release ink and indelibly stain garments to which they are attached, and these tags may be even more effective than the familiar electronic merchandise tags (DiLonardo and Clarke, 1996). Finally, in *Case Study #19*, Sloan-Howitt and Kelling (1990) document the remarkable success achieved within five years by the New York Transit Authority in ridding its subway cars of graffiti, an important component of which was a policy of immediate cleansing. This denied offenders the gratification of seeing their work on public display.

13. *Rule setting.* All organizations find it necessary to have rules about conduct in their fields of governance. For example, most businesses regulate employees' telephone use and all retail establishments require their employees to follow strict cash handling and stock control procedures. Organizations such as hospitals, schools, parks, transportation systems, hotels and restaurants must, in addition, regulate the conduct of the clientele they

serve. Any ambiguity in these regulations will be exploited where it is to the advantage of the individual. (Most attempts to avoid income tax relate to those sections of the IRS tax return that are more difficult to investigate Klepper and Nagin, 1987). One important strand of situational prevention, therefore, is rule setting — the introduction of new rules or procedures (and the clarification of those in place), which are intended to remove any ambiguity concerning the acceptability of conduct. For example, in attempting to reduce "no-shows," many restaurants will only accept reservations if callers leave a telephone number where they can be contacted if they do not appear. Some popular restaurants are now also requiring that reservations be accompanied by a credit card number against which a charge can be made for no-shows. A Manhattan restaurant reports that the scheme reduced no-shows at Thanksgiving from a total of 65 in the year before the scheme was introduced to zero in the two subsequent years (*New York Times*, January 31, 1996, p. C3). The same edition of the *New York Times* (p. B3) reports that taxicab fares from Kennedy airport to Manhattan have been fixed at a standard \$30 to prevent visitors being cheated. Fisherman in California have also recently been required to wear their fishing licenses, rather than merely to carry them, in a successful effort to get more anglers to comply with license purchase requirements (*New York Times*, November 10, 1993, p.C5). Not all such rules require the backing of the law. In an attempt to produce consensual crowd management at the Australian Motorcycle Grand Prix in 1991, riders were permitted to operate camp sites for their fellow motorcyclists and were encouraged to develop rules and procedures for use of the facilities. This helped to eliminate the brawls between the police and motorcyclists which had marred the event in previous years (Veno and Veno, 1993). Finally, in *Case Study #20*, Challenger demonstrates a marked reduction in "refund frauds" when new rules were introduced by stores in Australia requiring "proof of purchase" receipts.

14. *Stimulating conscience.* This situational technique can be distinguished from society's more general informal social control by its focus on specific forms of crime occurring in discrete, highly limited settings (Clarke and Homel, 1997). Rather than attempting to bring about lasting changes in generalized attitudes to law breaking, these measures serve simply to stimulate feelings of conscience at the point of contemplating the commission of a specific kind of offense. For example, signs at store entrances announce that "shoplifting is stealing" and in the Port Authority Bus Terminal in Manhattan they proclaim that "Smoking here is illegal, selfish and rude." Mobile roadside speed monitors have been used to give immediate feedback (without issuing fines) to individual cars traveling above the speed limit (Casey and Lund, 1993). An example of a more intensive and coordinated attempt to increase such informal sanctions is provided by recent advertising campaigns mounted in Australia to reinforce the powerful deterrent impact of random breath testing (Cavallo and Drummond, 1994). These made use of the slogan, "Good mates don't let mates drink and drive." Finally, in Britain, government television campaigns that accompany crackdowns on those who evade purchasing licenses required to own a television (the license fees help to finance the British Broadcasting Corporation) show those detected being treated by the police and courts as "common criminals." The British government has been repeating its advertising campaigns for more than two decades and claims (though without producing evidence) that applications for television licenses sharply increase whenever the campaigns are mounted.

75. *Controlling disinhibitors.* Crime is not only facilitated by tools such as weapons, but also by psychological disinhibitors, which include: (i) alcohol and drugs, which

undermine the usual social or moral inhibitions, or impair perception and cognition so that offenders are less aware of breaking the law (White and Humeniuk, 1994); (ii) propaganda, which can be directed at the dehumanization of target groups (such as Jews — see Bauer, 1990) and can provide the moral certainties and justifications that ordinary people need to commit atrocities and war crimes (Ellul, 1965); and (iii) television violence, which like propaganda, might "reduce or break down those inhibitions against being violent that parents and other socializing agencies have been building up in boys" (Belson, 1978: 17). The "V-chip," which under the Telecommunications Act of 1996 will become a feature of every new television set sold in America (Makris, 1996), allows parents to block reception of violent television programs. This is a situational response to the problem and constitutes an example of "controlling disinhibitors," though most examples of this technique relate to controls on drinking. Access to cars by intoxicated drivers can be restricted by breathalyzers built into the ignition, a measure that is sometimes mandated for recidivist drunk drivers (Jones and Wood, 1989; Morse and Elliott, 1990). A faculty-student committee at Rutgers University decided that beer should be served from kegs rather than cases at dormitory parties on grounds that (1) cases are easier to conceal and (2) in the words of a student: "If you have one keg and a line of 20 people behind it, people will get less alcohol than if you had a refrigerator and people were throwing out beer" (*New York Times*, September 13, 1991). The value of controls on drinking have been demonstrated in a variety of studies. Bjor *et al.* (1992) argue that "rationing" the amount of alcohol that individuals could bring into a Swedish resort town on Midsummer Eve helped to reduce drunkenness and disorderly conduct. Olsson and Wikstrom (1982, 1984) concluded that permanent closing of liquor stores on Saturdays in Sweden had reduced crimes of public drunkenness, assault and vandalism, and domestic disturbances in the summer months, and perhaps also for the remainder of the year. Introduction of a widely supported local ordinance banning the consumption of alcohol in public in central Coventry in England was followed by large reductions in complaints of insulting behavior and in numbers of people who regarded public drinking as a problem in the city (Ramsay, 1991b). *Case Study #21*, shows how the promotion of responsible drinking practices and other attempts to control intoxication led to a marked reduction in alcohol-related crime in the nightlife district in Surfers Paradise, a large resort in Queensland, Australia (Homel *et al.*, 1997).

16. *Facilitating compliance.* When Lombroso suggested in the 19th century that people should be locked up for publicly urinating in the streets, his pupil Ferri suggested an alternative more in keeping with the spirit of this book — the provision of public urinals (Hackler, 1978:12). Ferri's suggestion constitutes an example of facilitating compliance, the sixteenth opportunity-reducing technique. This has wide application and includes subsidized taxi rides home for those who have been drinking, litter bins and "graffiti boards" (the latter of which are supplied for people's public messages), and improved checkout procedures in libraries, which remove delay and thus excuses for failing to comply with rules for book borrowing (Boss, 1980; Greenwood and McKean, 1985). Finally, in *Case Study #23*, Shearing and Stenning (1984) provide a fascinating glimpse into the ways in which sophisticated crowd control and management — involving the use of pavement markings, signs, physical barriers (which make it difficult to take a wrong turn) and instructions from cheerful Disney employees — greatly reduce the potential for crime and incivility in Disney World.

### ***Effectiveness of Situational Prevention***

The examples of successful interventions mentioned in the course of describing the sixteen opportunity-reducing techniques, belong to its fourth component, the body of evaluated practice. This component also includes the evidence on displacement, but before moving to this topic it should be noted, in case a different message has been communicated through the cataloguing of successes, that situational prevention is not one hundred percent effective. Though reductions in crime may be considerable (often more than 50 percent), situational measures usually ameliorate, not eliminate a problem. In addition, situational measures do not always work as intended for a variety of reasons, including the following:

1. Measures have sometimes failed due to technical or administrative ineptitude, as when anti-climb paint to deter school break-ins was too thinly applied (Hope and Murphy, 1983), or when a scheme to defeat vandalism by replacing broken windows with toughened glass proved too complicated for school maintenance staff to administer (Gladstone, 1980).
2. Some measures have been too easily defeated by offenders, as in the case of the early steering locks in the U.S. and Britain which proved vulnerable to slide hammers (Clarke and Harris, 1992a), and that of the "smart" credit cards in France which could be disabled by stamping on the chip (Levi, 1992).
3. Too much vigilance has sometimes been assumed on the part of guards or ordinary citizens: Security guards rarely monitor CCTV systems as closely as designers expect; people pay far less attention to the street outside their homes than is sometimes assumed by neighborhood watch schemes and defensible space designs (Mayhew, 1979); and people rarely respond to car alarms so that the main result of their increasing use has been to reduce further the quality of life in cities (Clarke and Harris, 1992a).
4. Measures have occasionally provoked offenders to unacceptable escalation as in the case of the bullet-proofing of token booths on the New York subway which resulted in some attacks on booths with gasoline-fueled fires (Dwyer, 1991).
5. Some measures have facilitated rather than frustrated crime: Ekblom (1991) cites the example of pickpockets on the London Underground who stationed themselves near signs warning of theft to see which pockets were checked by passengers on reading the signs; and one result of introducing traffic bollards in Vancouver to frustrate cruising "Johns" was to give prostitutes somewhere to sit when propositioning clients who had slowed down (Lowman, 1992).
6. In other cases, measures have been defeated by the carelessness or idleness of potential victims. Residents routinely frustrate entry control systems on apartment buildings by propping open doors to save themselves from answering the door bell. The preventive value of the early security-coded radios was reduced because car owners failed to enter their private codes, thus allowing the radios to revert to a standard code known to thieves (Braga and Clarke, 1994).
7. The preventive value of these radios was further reduced because thieves did not always know which were security-coded and continued to steal ones they could

not use; this flaw was remedied by a continuously blinking light fitted to indicate that the radio was security-coded (Braga and Clarke, 1994).

8. Some inappropriate measures have been introduced because no proper analysis of the problem was undertaken. For example, Harris and Clarke (1991) argued that the parts marking provisions of the federal Motor Vehicle Theft Law Enforcement Act of 1984 were bound to fail because parts marking was restricted only to "high risk" automobiles; leaving aside the resultant scope for displacement, most of the defined "high risk" models are taken not for dismantling and sale of their constituent parts, but for joyriding which will not be deterred by parts marking.
9. Other measures have proved unsuitable because insufficient thought has been given to users' needs. For example, one security innovation left senior citizens "trapped inside a fortress of heavy doors and electronic card-key devices which they found difficult to understand and to operate, while neighbors were no longer able to keep a friendly eye on them" (Sampson *et al*, 1988: 484).
10. Finally, some measures have had a detrimental effect on the environment. Weidner (1996) argues that floor-to-ceiling turnstile railings installed at one New York City subway station did reduce fare evasion, but only at the cost of creating what was in many people's view "a draconian, prison-like environment." This could have been avoided had other, possibly equally effective measures, been taken instead.

These examples (as well as others provided by Grabosky, 1996) make clear that situational measures do not always work in intended ways. In addition, measures that work in one setting may not do so in another. An example is provided by helmet-wearing laws that dramatically (but fortuitously) reduced motorcycle theft in Germany (see below), but which had little effect in the United States. This was because the laws were not universally applied as in Germany, but were introduced in a piecemeal and inconsistent fashion (Mayhew *et al*, 1989).

None of the failures of situational prevention seriously call into question the basic validity of the concept, but they suggest that matters may be more complex than those implementing measures sometimes appreciate. Measures must be carefully tailored to the settings in which they are applied, with due regard to the motives and methods of the offenders involved. Where the stakes are high, offenders must be expected to test the limits of the new defenses and to be successful sometimes in identifying vulnerabilities. This process may be assisted by the arrival on the scene of more resourceful or determined criminals than was previously the case. And this again may sometimes result in the greater use of violence. For the less serious forms of crime, measures that depend upon natural surveillance or the vigilance of employees may be expected to lose their value as people become more complacent.

That preventive measures may have a limited life is not a counsel of despair; rather, it is a fact that must influence the choice among preventive options of varying difficulty and cost. The challenge for research is to help practitioners avoid the pitfalls by providing a sounder base of knowledge upon which to act. All we know at present is that some measures work well in certain conditions. What we need to know is which measures work best, in

which combination (Tilley, 1993c), deployed against what kinds of crime and under what conditions (Poyner, 1993). We also need to have much better information about the financial costs of particular crime prevention measures. As discussed below, this will require a greatly increased investment in evaluative research. It also means that the commitment to situational prevention has to be long term, which for many organizations and agencies will mean developing a permanent in-house capability.

### ***Displacement of Crime***

Under the dispositional assumptions of traditional criminological theory, situational variables merely determine the time and place of offending. Manipulating situations would thus simply cause offenders to shift their attention to some other target, time or place, change their tactics or even switch to some other categories of crime (Repetto, 1976). Displacement has therefore been the Achilles' heel of situational prevention, but this has changed with the theoretical developments described above. Under the rational choice assumptions that now guide thinking about situational prevention, displacement is no longer seen as inevitable, but as contingent upon the offender's judgments about alternative crimes. If these alternatives are not viable, the offender may well settle for smaller criminal rewards or for a lower rate of crime. Few offenders are so driven by need or desire that they have to maintain a certain level of offending whatever the cost. For many, the elimination of easy opportunities for crime may actually encourage them to explore non-criminal alternatives. On the other hand, since crime is the product of purposive and sometimes inventive minds, displacement to other categories of offense would not be unexpected, so long as these new crimes served the same purposes as the ones that were thwarted.

Numerous examples of displacement have been reported, particularly in the early literature (Gabor, 1990). Street crimes increased in surrounding districts following a successful crackdown on these crimes in one New York City precinct (Press, 1971). The reduction in robberies following the introduction of exact fare systems on New York City buses was accompanied by an increase of robbery in the subway (Chaiken *et al.*, 1974). In Columbus, a police helicopter patrol (Lateef, 1974) and, in Newark, a street lighting program (Tyrpak, 1975) appeared to shift crime to precincts not covered by the new measures. The reduced risk of theft for new vehicles fitted with steering column locks in Britain was found to be at the expense of an increased risk for older vehicles without the locks (Mayhew *et al.*, 1976). Gabor (1981) found that a property marking program in Ottawa may have displaced burglaries from the homes of participants to those of non-participants. Finally, Allatt (1984) found that the decrease in burglary on a British public housing estate which had undergone "target hardening" was accompanied by an increase of property crimes in adjacent areas.

Apart from these and other instances in which displacement was found, researchers may sometimes have failed to detect displacement that had in fact occurred. This is especially likely where the displacement involved kinds of crime other than the ones targeted. Thus, the reduction of aircraft hijackings in the 1970s achieved by baggage screening might possibly have resulted in an undetected increase in other terrorist activity, such as car bombings, assassinations and hostage taking. The methodological difficulty encountered in detecting such displacement has been explained as follows:

If, in truth, displacement is complete, some displaced crime will probably fall outside

the areas and types of crime being studied or be so dispersed as to be masked by background variation. In such an event, the optimist would speculate about why the unmeasured areas or types of crime probably escaped displaced crime, while the pessimist would speculate about why they probably did not. No research study, however massive is likely to resolve the issue. The wider the scope of the study in terms of types of crimes and places, the thinner the patina of displaced crime could be spread across them; thus disappearing into the realm of measurement error (Barr and Pease, 1990: 293).

On the other hand, the uncritical acceptance of displacement might have meant that increases in crime, that would have occurred anyway, have sometimes been wrongly attributed to displacement. For example, London Underground officials believed that the appearance of a new kind of slug soon after ticket machines had been modified to prevent the use of an earlier, more primitive slug, was the result of displacement. However, Clarke *et al.* (1994) showed that the new slugs were found in different stations from the earlier ones, which suggested that different groups of offenders were involved. They concluded that, even if action had not been taken against the original slugs, the new ones might still have appeared.

With the development of rational choice analyses, evidence has begun to accumulate of the successful application of situational measures with few displacement costs. Thus, after reviewing 55 studies of displacement, Hesselting (1994) concluded that displacement was not found in 22 studies, and was never 100 percent in the remaining studies (see also Gabor, 1990, and Eck, 1993; Ferreira, 1995).

Much of this evidence on displacement comes from studies reproduced in this book. For instance, Knutsson and Kuhlhorn (1981) found no evidence of an increase in a range of "conceivable" alternative crimes as a result of the introduction of new identification procedures that greatly reduced check frauds in Sweden (*Case Study #7*). Following the rearrangement of market stalls and improved lighting which reduced thefts at covered markets in Birmingham, England, no evidence was found of displacement of thefts to other nearby markets (*Case Study #4*). When Caller-ID became available in some parts of New Jersey, there was little evidence of an increase of obscene calls in other areas (*Case Study #5*), perhaps because obscene phone callers are generally not persistent random dialers, hoping to hit upon susceptible women. Rather, many appear to victimize only particular women of their acquaintance and, with the introduction of Caller-ID in their local telephone areas, these individuals are unlikely to have begun calling more distant parts of New Jersey where they knew no one. Finally, Matthews (1990) found little evidence that prostitutes simply moved to other locations following successful action to close down the red light district in Finsbury Park, which he explained by a relative lack of commitment to prostitution among many of the women involved (*Case Study #3*). As the environment in Finsbury Park became less hospitable "...it would seem that over a period of about one year, most of the girls gave up prostitution or moved back home or elsewhere. For many, their normal period of involvement in prostitution may have been three or four years and, therefore, the effect of intensive policing was to shorten that period for a year or two in most cases."<sup>6</sup>

In other cases cited above, the nature of the targeted offenses would have meant there was little point in looking for displacement. For example, it is unlikely that those deterred by random breath tests from drunken driving in New South Wales (Hemel, 1993) or those

deterred by speed cameras from speeding in Victoria (Bourne and Cooke, 1993) would have displaced these behaviors to some other time or place. People do not usually set out to commit these offenses, but will do so when circumstances dictate (Homel, 1993). One important circumstance is the perceived chance of arrest and, were the ubiquitous speed cameras or random breath testing patrols to be withdrawn, people would no doubt once again revert to their old ways.

### ***Understanding Displacement***

Deeper understanding of the motives and modus operandi of target groups of offenders, as obtained in Matthews' study, provides a way of dealing with the limitations of the statistical search for displacement discussed by Barr and Pease (1990). It may not always be possible to interview offenders, but in some cases insights into motivation and methods can be provided by closer analysis of patterns of offending. For example, Clarke and Harris (1992b) have shown important differences among automobiles in their risks for different forms of theft, which reflect the motives of offenders. Thus, new cars most at risk of "stripping" in the United States during the mid-1980s were predominantly European models with good audio equipment; those most at risk of "joyriding" were American-made "muscle" cars; and those at risk of theft for re-sale were mostly higher-priced luxury automobiles. These "choice structuring properties" (Cornish and Clarke, 1987) of the target vehicles are not difficult to understand in terms of the motives of offenders and would also help to direct the search for displacement if the security were improved for any subset of vehicles. Thus, if some "muscle" cars were made more difficult to take for joyriding it would make sense to confine the search for displacement only to others of the same group.<sup>7</sup>

Similar logic was followed by Mayhew *et al.* (1989) in their study of displacement following the reduction of motorcycle thefts in West Germany between 1980 and 1986, brought about by the progressive enforcement of helmet legislation. During this period, motorcycle thefts declined by more than 100,000 because the helmet requirement substantially increased the risks of opportunistic thefts for those offenders who were unable at the same time to steal a helmet.<sup>8</sup> Mayhew and her colleagues reasoned that since many opportunistic thefts would have been for purposes of joyriding or temporary use (for example, to get home late at night), the most likely result of the reduced opportunities for stealing motorcycles would be an increase in thefts of cars and bicycles. In fact, as shown by Table 2, there was little evidence of displacement to either category of target. Car thefts did rise over the same period, but only by a few thousand, while bicycle thefts declined (after an initial rise) to below their previous level. Bicycles may not usually provide a realistic or attractive alternative means of transportation, whereas cars may not provide the same joyriding thrills. They may also require more knowledge to operate and may be more difficult to steal.

A final illustration of the value of considering "choice structuring properties" is provided by the British gas suicide story (Clarke and Mayhew, 1988). The elimination of gas suicides in Britain in the 1960s and 1970s resulting from the introduction of natural gas (which contains no toxins) was not followed by substantial displacement to other forms of suicide. Consequently, the overall suicide rate for the country declined by about 40 percent. The lack of displacement was explained by Clarke and Mayhew in terms of the particular advantages of domestic gas as a form of suicide. It was readily available in every home, it

was simple to use, and it was highly lethal. It was also painless, left no marks or blood, and required little courage. No other alternative possessed all these advantages and would therefore have provided an acceptable alternative for many people.

It has been argued that it will only be a matter of time before the suicidally-inclined in Britain displace to other methods and the suicide rate reverts to its former level. Indeed, there has been some increase in the suicide rate for males who have been making more use of other methods (including car exhaust gases, Clarke and Lester, 1987). However, there is substantial evidence that for many people the urge to kill themselves is in response to situational stress (such as a bereavement) and may dissipate as depression is alleviated. The gradual increase in the male suicide rate may therefore reflect, not "delayed displacement" by people prevented from killing themselves by the detoxification of gas, but an independent increase in the motivation to commit suicide.

This argument about the consequences of gas detoxification should not be taken to mean that longer-term adaptations never occur in response to situational measures. Indeed, it is widely believed that car thieves have gradually found ways to defeat steering column locks and support for this can be found in the somewhat higher than expected rates of car

**TABLE 2**  
**THEFTS OF MOTORCYCLES, CARS, AND BICYCLES:**  
**FEDERAL REPUBLIC OF GERMANY, 1980-86**

<b>Year</b>	<b>Motorcycles</b>	<b>Cars</b>	<b>Bicycles</b>
1980	153,153	64,131	358,865
1981	143,317	71,916	410,223
1982	134,735	78,543	453,850
1983	118,550	82,211	415,398
1984	90,008	72,170	376,946
1985	73,442	69,659	337,337
1986	54,208	70,245	301,890

Source: Mayhew *et al.* (1989).

theft in some countries, especially Britain, where the locks have been available for many years (Clarke and Harris, 1992a). On the other hand, the reduction in the rate of car thefts in West Germany, brought about by the introduction of steering column locks in the 1960s, has persisted to this day (*Case Study #7*). One possible reason for this (apart from the possibly higher quality of the German equipment) is that theft was greatly reduced almost overnight because the locks were made compulsory for all cars on the road. Consequently, neophytes were deprived of the example and tutelage of experienced car thieves. This affords a marked contrast to the situation in Britain where the locks were introduced only for new cars at manufacture. Consequently, car thieves could continue to operate so long as they concentrated their efforts on older vehicles. This meant they could gradually learn ways of defeating the steering locks and could continue to pass on the tricks of the trade to novices.

### ***Diffusion of Benefits***

Even when displacement occurs, it may sometimes be "benign" (Barr and Pease,

1990), as in the case of preventive measures which bring relief to repeatedly victimized groups although at the cost of an increased risks for others. This observation guided the design of an experiment to reduce burglary in Kirkholt, a public housing estate in the North of England (Pease, 1991). Target hardening priority was given to houses that had recently experienced a burglary, with the result that, despite their higher risks, few of these houses experienced a repeat burglary in the follow-up period. Pease also noted that these preventive benefits permeated, through what he called a process of "drip-feed," to other households that were not target-hardened so that the burglary rate for the whole of the Kirkholt estate declined dramatically.

The "drip-feed" effect is, of course, the reverse of displacement in that preventive action led, not to an increase, but to a reduction in crimes not directly addressed by the measures. As Clarke and Weisburd (1994) observe, similar effects have been noted under a variety of other names. For example, Miethe (1991) has referred to the "free rider" effect when residents benefit from the crime prevention measures taken by their neighbors and Sherman (1990) to the "bonus" effect sometimes observed in police crackdowns when there is a carryover of the preventive effect beyond the period when the crackdown is in force. Scherdin (1986) used the term "halo effect" when reporting that book detection systems prevented thefts, not just of the electronically protected materials, but also of other materials as well. In some cases, the phenomenon has been reported without giving it a name. Poyner and Webb (*Case Study #4*) found that measures to reduce thefts from shopping bags in particular city center markets seemed also to reduce thefts in other markets as well. In his evaluation of a CCTV system installed to reduce auto theft at a university, Poyner (*Case Study #77*) found an equal reduction of crime in the parking lot not covered as the ones that were covered by the cameras. In his study of CCTV on buses, he found that damage and other misbehavior was reduced, not only on five buses fitted with cameras, but throughout the whole fleet of 80 buses (Poyner, 1988).

Despite the variety of terminology, in all these cases the same phenomenon has been observed. That is to say, reductions in crime have occurred which are difficult to attribute to the direct action of situational measures. Clarke and Weisburd (1994) have argued that the generality of the phenomenon demands a standard term and they have proposed "diffusion of benefits," since the geographical and temporal connotations of this term parallel those of "displacement of crime." They have defined diffusion as:

the spread of the beneficial influence of an intervention beyond the places which are directly targeted, the individuals who are the subject of control, the crimes which are the focus of intervention or the time periods in which an intervention is brought (Clarke and Weisburd, 1994:169).

They have also distinguished between two forms of diffusion which they call deterrence and discouragement. Deterrence was invoked by Scherdin (1986), for example, in explaining why the book detection system she studied also prevented thefts of items that were not electronically tagged, and by Poyner in identifying reasons for the general decline in damage to the fleet when only some of the buses were fitted with CCTV cameras: "The children have learned...that the cameras will enable misbehaving individuals to be picked out and that action will be taken..They appear to believe that most buses have cameras, or at least they are uncertain about which buses have cameras" (Poyner, 1988:50).

For diffusion by "discouragement," the key is not the judgment of risk, but the

assessment of effort and reward. For example, one component of the successful action against burglary in Kirkholt was the removal of prepayment meters from many houses on the estate (Pease, 1991). This seems to have been enough to discourage potential burglars who could no longer be sure of finding a meter containing cash. Similarly, the drop in thefts at all Birmingham city center markets following the situational measures taken at only some of them may have been due to the fact that: "The general attractiveness of this area for thieves has reduced" (*Case Study #4*). Ekblom (1988b) accounted for the fact that anti-bandit screens in London post offices had produced a reduction, not just in over-the-counter robberies, but also in other robberies of staff and customers by speculating that would-be robbers may have received "the very general message that something had been done to improve security at the sub-post offices" (Ekblom 1988b: 39). Finally, Clarke *et al.* (1991) have suggested that an intensive target hardening program in Australian banks brought about a general reduction in robberies of all commercial targets (including convenience stores, gas stations and betting shops) because robbers began to believe that this form of crime was no longer worth pursuing.

It would be difficult to overestimate the importance of diffusion of benefits if the phenomenon is as common as these various examples suggest. By showing that the preventive benefits of situational measures extend beyond their immediate focus, the debate about their value is transformed. It is also clear that much more needs to be discovered about ways of enhancing diffusion. Sherman (1990) has suggested that the "free bonus" of crackdowns might be increased by randomly rotating crackdowns and back-offs across times and places so as to lead offenders to overestimate the actual levels of risk in force on any particular occasion. He also advocated the deliberate use of publicity about imminent crackdowns to promote this uncertainty in offenders' minds. Clarke and Weisburd (1994) argue that these strategies might be employed to diffuse the benefits of other forms of "situational deterrence" (Cusson, 1993) than crackdowns, and they also identify other possible means of enhancing diffusion, such as concentrating preventive action on highly visible or attractive targets, so as to lead offenders to think that preventive measures may have been more generally applied.

Since these various strategies depend upon influencing judgments made by offenders, we need to learn more about ways that offenders obtain and process information about preventive initiatives and what role is played in this process by their own direct observation, their relationships with other offenders and information obtained through the media. Whatever the practical pay-off from such studies, it is likely that diffusion of benefits will soon supplant displacement as the principal focus for theoretical debate about the value of situational measures.

### ***A Prescription for Evaluation***

Because diffusion has been overlooked, cases may already exist in which the effects of situational measures have been underestimated. Most existing evaluations have made use of "quasi-experiments," or "natural experiments," in which researchers have taken advantage of new preventive interventions to examine effects on crime through use of time series data, or a comparison with "control" data from an untreated site. Increased crime in the controls is usually attributed to displacement resulting from the situational measures, rather than to some extraneous increase in crime. On the other hand, decreased crime in the controls has not generally been attributed to diffusion, but to some overall, extraneous

*decline* in crime.

Even without the difficulties of measuring displacement and diffusion, the interpretation of situational evaluations is problematic. Though declines in crime may be large, one cannot be confident about the durability of success because follow-ups are often brief, sometimes less than one year. In some of the studies, several preventive measures were deployed at the same time and their relative contributions to the outcome are unknown. For example, Felson *et al.* (1996) list eleven different measures that were introduced at the Port Authority Bus Terminal to deal with misuse of the restrooms. Finally, competing explanations for reported reductions in crime (other than as the result of the situational measures) have been insufficiently investigated in many of these quasi-experimental studies.

The weaknesses of quasi-experiments (see *Case Study #16* for a brief discussion), have led to calls for greater use of true experimental designs, involving random assignment of preventive measures between treatment and control groups (Sherman, 1996; Weisburd, 1997). However, while suited to the laboratory, these designs often involve serious ethical problems and are difficult and costly to implement in the real world (Clarke and Cornish, 1972; Farrington, 1983). These difficulties include: (i) attempts by practitioners, who may have their own views of the intervention, to subvert randomization; (ii) the reactive effects of the experiment, with the particular danger of "Hawthorne effects" resulting from the difficulty of concealing the fact that some areas or groups are receiving new treatments; (iii) the commitment of those administering the experimental treatment which may play an important role in the results; (iv) differential rates of attrition that may result in the non-comparability of randomly selected experimental and control groups; (v) changes over time in the intervention; and (vi) ethical problems involved in providing different levels of service to experimental and control groups or areas.

More serious than any of these difficulties is that crime prevention interventions are not like drugs, i.e. treatments with precisely measurable and controllable chemical constituents. Rather, they consist of a complex interaction of several related social and physical elements. This makes it impossible to be certain about the precise cause of any effect demonstrated by the experiment. One example is provided by a rare experiment concerned with shoplifting (Farrington *et al.*, 1993), in which three measures (electronic tagging, redesign of merchandise layout, and security guards) were systematically compared for effectiveness. Each measure was introduced in two stores selling electronic merchandise, while three other stores served as controls. It was concluded that electronic tags and store redesign were effective in reducing shoplifting (at least during the brief follow-up of three to six weeks), but that store redesign was undermined by further changes made by clerks to increase sales. The security guards, on the other hand, were not effective though the researchers acknowledged that this may have been due to store layouts which made it difficult to watch customers, or to the inexperience, advanced age, unimpressive physiques and lack of training of the particular individuals concerned.

It is most unlikely that these possibilities could be systematically explored within the confines of a rigorous experimental methodology. Few if any retail stores would tolerate the interference in their operations demanded by the experiments (or, more likely, series of experiments). Unless employed to do so, few criminologists would want to devote so much effort to sorting out the minutiae of security guard effectiveness in preventing shoplifting in just one kind of store. Many other, more rewarding problems beckon them. Add to this the difficulties of studying displacement and diffusion, which experimental

designs do not necessarily solve and may even exacerbate because of the greater interference in the real world that may be required, and it becomes clear that these designs will have to be reserved for cases where it is imperative to achieve as much certainty as possible.

A more appropriate evaluative strategy for situational prevention will need to recognize that the value of particular situational measures is highly contingent on the nature of the problem and the circumstances in which it arises. Something that works in one situation will not necessarily work in another. What is needed is some quick, and occasionally rough, indication of whether a newly introduced measure is working. Since situational measures often achieve large reductions in crime, a simple time series or a comparison with a control group will frequently suffice. Where measures appear not to have worked, some possible explanations for this are also needed. Armed with this information, the action-researcher knows whether something else should be tried and, perhaps, what this should be.

Given the vast number of natural experiments being conducted in all manner of settings, the optimal strategy therefore seems to be: (1) to undertake as many evaluations as possible, (2) to compensate for weaker designs with detailed observation of the process of implementation (the value of which is illustrated by Farrington *et al.*'s observations about the caliber of their security guards), (3) to include as much information as possible about the costs and practicability of the techniques studied, (4) to conduct periodic meta-analyses of results (for examples see Poyner, 1993, Hesselting, 1994, and Eck, In preparation), and (5) to piece together the findings with reference to a systematic classification of situational techniques. This accumulating body of empirical results contributes to the development of robust principles of opportunity-reduction, which will help in developing tailor-made solutions for new problems arising in fresh circumstances. This strategy seems consistent with other recent writings about the need for theory-based evaluations of community initiatives (Connell *et al.*, 1995; Weiss, 1995).

The ultimate objective of the empirical evaluations is therefore not to document the precise value of particular interventions (say, security guards) observed under particular circumstances, but to build our detailed understanding of the principles of effective opportunity-reduction. Since situational crime prevention practitioners are constantly called upon to provide tailor-made solutions for new problems arising in fresh circumstances, they will be helped more by a robust and detailed theory of opportunity reduction, than by attempts to catalogue the effectiveness of a host of variations on specific crime prevention measures.

### ***Implementation Difficulties***

Crime prevention is no longer the inoffensive and neutral activity it once was in the days when it consisted purely of publicity exhorting people to lock it or lose it, and advice from the police on locks and bars. Now it involves the police and central/local government seeking to influence the civil behaviour of particular individuals, private companies and local authority departments responsible for the creation of criminal opportunities or motivation; instead of tackling the 'common enemy, crime', it cuts across conflicting public and private interests and policies, and has to compete for resources with other goals and needs, not always as a front runner. Reconciliation of all this conflict and competition means that crime prevention has to be slipped in by changing attitudes and expectations, by good salesmanship, clever design, close

attention to cost effectiveness, sometimes piggybacking on other facilities and changes in an organisation, and using data recording systems developed and maintained primarily for other purposes (Ekblom, 1987a: 11-12).

This extended quote may be a useful corrective to the case studies reprinted in this volume which are largely silent about the difficulties encountered in implementing situational prevention with the notable exception of *Case Study #21*. Rarely do the difficulties concern the identification of suitable measures since many alternative ways exist of blocking opportunities for specific classes of crime (cf. Hope, 1985; Smith, 1987). Rather, the difficulties of implementation usually concern acceptance of the responsibility for preventive action and issues of cost and coordination.

Because most situational prevention to-date has been undertaken in the public sector, discussion of implementation difficulties has focused largely on ways of achieving the necessary coordination among local government agencies (e.g. Gladstone, 1980; Hope, 1985; Ekblom, 1987a). Coordination is especially difficult when attempting to combine situational with "social" or "community" crime prevention measures (e.g. Blagg *et al.*, 1988; Sampson *et al.* 1988; Liddle and Gelsthorpe, 1994; Gilling, 1996; Hughes, 1996; Sutton, 1996, Walters, 1996). However, with increasing recognition that much preventive action can be undertaken only by the private sector, for example by credit card companies, bus operators, offices and shopping malls (cf. Felson and Clarke, 1997a), more attention is being focused on issues of responsibility and costs. Those in the private sector tend to see crime prevention as a police matter and are rarely willing to "acknowledge that their property or operations are generating a substantial strain on police resources, accept that they have a duty, up to their level of competence, for the control of specific crimes, and take appropriate action" (Engstad and Evans, 1980:151). Acknowledging this responsibility would not only complicate the management task, but could involve the expenditure of significant resources. Analyses of these costs are therefore likely to play an increasingly important role in crime prevention (Burrows, 1991).

These points are illustrated by the familiar example of shoplifting, which is facilitated by some retailing practices including displays to encourage impulse buying. The risks of the ensuing "shrinkage" are accepted by most stores, which rely upon deterrence to contain the problem through the occasional arrest and prosecution of shoplifters. This results in significant costs being passed on to the criminal justice system, which are not borne by retailers except in an indirect way through taxation.

These practices will not be changed simply by government exhortation, which runs the risk of being dismissed as "blaming the victim" (Karmen, 1984). Nor could stores often be charged for police service when they have failed to adopt preventive measures (Pease, 1979). However, declining retail profits due to increased competition might force stores to take a more proactive role in prevention. This might also be facilitated by improved technology, which now permits instant credit checks (Levi *et al.*, 1991) and tighter stock control (Hope, 1991). The technology will always need to pass the retailer's cost-benefit scrutiny, but this will not take account of the criminal justice costs of failing to take preventive action. There will therefore be an increasing role for research such as that undertaken by Field (1993) on the costs of auto theft in the United States, which included analysis of criminal justice costs and of the potential savings that might result from government-mandated vehicle security standards.

### ***Philosophical and Ethical Issues***

When first introduced, the concept of situational prevention provoked fears about two unwelcome developments in society. In its more unattractive, "target hardening" forms (barbed-wire, heavy padlocks, guard dogs and private security forces) it suggested the imminence of a "fortress society" in which people, terrified by crime and distrustful of their fellows, barricade themselves in their homes and places of work, emerging only to conduct essential business (Davis, 1990). In its use of electronic hardware (CCTV, intruder alarms, x-ray scanning of baggage), it raised the specter of totalitarian, "Big Brother" forms of state control.

Experience of situational measures has dispelled some fears of the fortress society (though not all, cf. Bottoms, 1990). Many of the measures (such as parts marking of automobiles and the interior lighting of banks at night) are so unobtrusive as to be barely noticeable, while others (including street lighting, defensible space architecture, and uniformed security guards in shopping and leisure complexes) actually reduce the fear of crime. Yet other measures which enhance security, such as bar coding of merchandise and central locking of automobiles, also have the advantage of increasing the convenience of everyday life.

This very unobtrusiveness and convenience feeds the second fear—that it may not be the fortress society that is imminent, but Huxley's "brave new world." If America is the harbinger of change for the rest of the world, how much more true might not this be of Disney World? The unobtrusive yet powerful social control exemplified there (*Case Study #23*), under which people willingly accept being corralled and shepherded from place to place, may soon be shaping much of our leisure behavior, if not our lives! Add to this the astonishing growth in the technological devices now available to the "new surveillance" (Marx, 1986), and the potential for state control, not of the iron fist but of the velvet glove, seems frightening.

While credible under fascism or a dictatorship, this scenario of a sheep-like populace gives altogether too little credence to the power of democracy. Visitors to Disney World might temporarily surrender some autonomy, but only because they recognize that a degree of regimentation may be necessary if they are to enjoy the spectacles in safety and at reasonable cost. People may increasingly be willing to make this trade in their daily lives, but it will soon become apparent if they are not: Disney World will go broke. Moreover, while they may welcome powerful new forms of surveillance in guaranteeing national security or combating organized crime, they will fight its deployment in the everyday situations giving rise to most crime as soon as they perceive a threat to their civil liberties.

Nor is the vision, or perhaps nightmare, of a blanket application by the State of situational controls on behavior consistent with the essence of situational prevention: Situational measures cannot be applied wholesale; they need to be tailored to the particular circumstances giving rise to specific problems of crime and disorder. Moreover, unlike most other measures of crime control, situational measures are not the sole prerogative of the State, but need to be applied by particular private or business organizations. Far from being enthusiastically embraced, they may be strongly resisted. Indeed, the problem is less one of the sweeping application of situational measures, than of the failure to apply them when they should have been.

While ethical and legal questions surrounding particular situational measures, such as

gun controls, have been extensively analyzed, there has in fact been comparatively little general discussion of the ethics of situational prevention. This is because both critics and advocates have been preoccupied with its effectiveness. As evidence accumulates of its preventive value in a wide variety of crime contexts, the focus of debate is likely to move increasingly to ethical and philosophical questions (Homel, 1996).

Fears will no doubt continue to be expressed about the fortress society and about Orwellian forms of surveillance, especially with the growing use of CCTV cameras in public places (Honest and Charman, 1992; Tilley, 1993c; Home, 1996; Davies, 1996a,b). Because situational prevention sees everyone as susceptible to crime opportunities, it will continue to be criticized for its essentially cynical and pessimistic character, even though it seems more morally defensible than the traditional view of crime as the province of a small group of criminal individuals. This can provide a device for scapegoating particular individuals and groups and for justifying highly punitive or intrusive interventions (Seve, 1997). However, the debate about ethics in the next decade is likely also to encompass a broader set of issues relating to "victim blaming" and to distributive justice.

Victim blaming was mentioned above in the context of persuading businesses to modify criminogenic products and practices. Another vocal group on this subject are victim advocates who resist any imputation of victim responsibility because this might jeopardize the achievement of better rights and treatment for victims. However, most victims would no doubt prefer to have been protected from crime in the first place than to receive compensation or better treatment later. Most would also welcome sound advice on precautionary measures. Victim advocacy should therefore find a natural, symbiotic relationship with crime prevention, which neither compromises victim rights nor absolves offenders of responsibility. The position has been expressed as follows:

The whole point of routine precautions against crime is that people can take responsibility without accepting criminal blame or even civil liability. Routine precautions by potential victims do not serve to exempt offenders from criminal responsibility. The citizen who reminds herself to lock her car door and does so still has a right to expect others not to steal that car, whether it is locked or not.... If crime opportunities are extremely enticing and open, society will tend to produce new offenders and offenses. By inviting crime, society will make it more difficult for the law enforcement system to prosecute and punish those who accept the invitation. With situational prevention, invitations to crime are fewer and hence it is more difficult for those who do offend to escape responsibility (Felson and Clarke, 1997b).

One of the topics arising under distributive justice is the risk of displacement following preventive action — particularly displacement from the rich, who can afford situational prevention, to the poor who cannot. This concern, often raised in the context of "gated communities" (wealthy residential enclaves), is related to a second concern that situational measures can be used by the powerful to exclude undesirables — such as the poor, minorities and young people — from public places such as shopping malls, parks, town centers and particular neighborhoods (O'Malley, 1994; White and Sutton, 1995).

On displacement from rich to poor, the issues are by no means straightforward. A wealthy neighborhood near to less affluent communities may provide a magnet for crime and, if it provides tempting targets and easy rewards for crime, may draw people into burglary who might otherwise not have become involved. On the other hand, reducing the opportunities for burglary may be unlikely to drive offenders back to the less wealthy areas

where the pickings may be more meager. There is even the possibility that the preventive measures taken in one community might benefit a neighboring one through a process of diffusion. Measures taken by the wealthy may thus sometimes benefit the less affluent. A concrete example is provided by LOJACK, a vehicle tracking system that consists of a small transmitter hidden in a car that can be activated to facilitate recovery when the car is stolen. LOJACK is too expensive for everyone to buy, but a recent study suggests that it brings general benefits in terms of reduced car theft (Ayres and Levitt, 1996). One reason is that car thieves do not know whether any given vehicle is equipped with LOJACK because police have made this a condition of collaborating in the retrieval of cars fitted with the transmitters.

In addition, many so-called exclusionary measures are not the prerogative of the rich. It may be the case that in New York, doormen are found only in apartment buildings for the wealthy, but in Europe concierges are found in many middle- and low-income apartment blocks. Many public housing estates have manned entrances and some poor communities make use of street barriers to exclude drug dealers and others who might prey upon residents (Atlas and LeBlanc, 1994). Indeed, Oscar Newman's (1972) original "defensible space" work, the start of scientific interest in opportunity-reduction, was undertaken in public housing and makes use of design to help residents police the public areas of the estate. More recently, he has described how the use of gates to create "mini-neighborhoods" in a down-town low-income rental community in Dayton, Ohio, substantially reduced traffic and crime problems (Newman, 1996).

In some cases, cultural attitudes will prevent the adoption of particular situational measures, even though they might have been accepted elsewhere. Thus, photo radar is widely used in Australia, but was recently made illegal in New Jersey (Clarke, 1995), while a scheme to reduce fraudulent checks requiring a thumbprint has been adopted in New Jersey (*New York Times*, March 23, 1997, Sctn. 13, p. 1) when a similar scheme was rejected in Western Australia (Pidco, 1996). Even for the same population, what is found objectionable or intrusive can change over time. Witness changed attitudes to smoking or wearing seat belts.

Where situational measures are vetoed on ethical grounds or simply found objectionable, alternative situational measures can often be found that do not provoke these same reactions. Nevertheless, an improved understanding of ethical costs for the broad swathe of situational techniques would be of considerable value in planning interventions. Indeed, the greater attention being paid to these issues may result in general ethical guidelines, to be used together with improved information about the cost-effectiveness of particular measures, in tailoring responses to crime problems.

### ***Political and Professional Constituencies for Situational Prevention***

At the beginning of this Introduction, it was argued that situational prevention is a radically new form of crime control focused not on criminals, but on criminogenic situations, with all that implies for criminological explanation. Situational prevention can also be regarded, however, as a logical outcome of the precautions that people have always taken to protect themselves from crime and, seen in this light, it is little more than the systematization of a wide range of everyday, commonsense practices. That two such divergent views can be taken of situational prevention helps to explain why it is widely practiced in all but name, while at the same time it is resisted by many criminologists and

politicians.

Its lack of political support may be surprising: The Left might have welcomed its focus upon local problems and local decision-making; Liberals might have been attracted to its essentially non-punitive philosophy; and Conservatives might have been attuned to its message concerning the need for agencies and communities to take the initiative in dealing with their crime problems. Perhaps the very breadth of this appeal means that situational prevention lacks a natural constituency among politicians, but they also have other reasons to resist it. It is too easily represented as being soft on crime and as blaming victims. It seems to demand new resources, in addition to those already allocated to the criminal justice system. It is easily characterized as demonstrating a failure of political will in dealing with the severe social and economic problems that confront society. Its essentially piecemeal approach affords little prospect of achieving immediate reductions in overall crime rates and its rational, analytic nature does not lend itself to eloquence in campaign speeches or political manifestos.

Politicians may indeed have a limited role in promoting situational prevention because particular measures often have to be initiated at a local level, sometimes by private sector organizations. The grass roots formulation of crime control must encourage cost-benefit appraisals of prevention and might result in more effective action, but it means that national politicians cannot claim the successes. When they do promote "situational" programs, such as neighborhood watch, there is the risk of this leading to the kind of unfocused efforts, out of keeping with the tenets of situational crime prevention, that result in disappointment and disillusionment. When central government intervention is indicated, as in the case of persuading vehicle manufacturers to improve security, this may not require laws enacted by politicians, but patient, "behind the scenes" negotiations conducted by civil servants to persuade reluctant parties to take preventive action.

Despite its lack of a political constituency, situational prevention has become a component, though a small one, of crime policy in some European countries (Willemse, 1994; Garland, 1996). This may be because civil servants can sometimes be more pragmatic than their political masters. Both in Holland and Great Britain, situational prevention is promoted by government crime prevention units and by a semi-autonomous governmental agency in Sweden. Its record of success and the resolution of ethical and theoretical dilemmas will mean that its policy role will grow, even in the United States where interest has been lagging. As mentioned above, this may be due partly to the disappointing results of attempts to implement CPTED in the 1970s. However, Bright (1992) has noted the absence of any crime prevention policy in America, which he attributes to a dislike of government intervention as well as to a strong ethos of personal responsibility that results in punishment being seen as the most appropriate response to law-breaking. Nevertheless, the recent federal government support for community and problem-oriented policing may signal a change, likely to benefit situational prevention.

Since the responsibility for much preventive action falls on the private sector, government officials promoting situational prevention will need to become familiar with a world that is now foreign to many of them. Their usual modes of governing, based upon fiscal control and parliamentary or congressional authority, will have to be supplemented by other change strategies, including negotiation and persuasion (Burrows, 1997; Travis, 1997; van Dijk, 1997). Some difficult issues, discussed above in the context of shoplifting, will also have to be addressed concerning the role of government in helping to prevent

crimes that impact profitability and which businesses might be expected to deal with themselves. Without a lead from government, however, many crime problems bringing harm to businesses and their clienteles, or caused by business practices, might never be addressed. Without government research funding, it is also unclear how the requisite body of knowledge about preventing crime in commercial establishments would be accumulated (Felson and Clarke, 1997a).

While its role in policy now seems assured, situational prevention still lacks a strong professional constituency. Since it can be used by such a wide range of public and private organizations, it will never be of more than marginal interest to any particular group of managers. The security industry also may resist an approach which could reduce the demand for guards and security hardware, the industry's main staples. Finally, police interest in situational prevention is likely to be subsumed under problem-oriented policing.

At the same time, situational prevention expertise is increasingly being sought in a wide range of settings, public and private. Towns and cities in Britain and Holland are beginning to appoint crime prevention or "community safety" officers, and some criminologists are already employed in a preventive capacity in business and industry (Burrows, 1997; Challenger, 1997). In America, Felson (1994b) has proposed that university departments of criminology and criminal justice should operate a crime prevention extension service based on the successful agricultural model.

These developments offer considerable training and employment opportunities for criminologists, but not without some changes of attitude. More young criminologists will need to define their theoretical goals more in terms of control than enlightenment, and will need to define control more in terms of reducing opportunities than propensities. They will have to become familiar with a host of social institutions — schools, factories, hospitals, rail and bus systems, shopping malls and retail stores — beyond the courts and the prisons. They must no longer disdain the business world, but must recognize its central role in the production and control of crime (Felson and Clarke, 1997a). Their role models will increasingly need to become traffic engineers and public health specialists — professionals employed to improve everyday life — rather than academics and social commentators. In short, a more down-to-earth, pragmatic approach will be required.

Sutton (1996) and O'Malley (1997) have argued that such pragmatism conflicts with the philosophy and values of criminology students, many of whom aspire to be social reformers seeking a reduction in inequality and deprivation. While these are admirable ambitions, equally rewarding and challenging careers await those who can shift their professional goals from long-term social reform to making an immediate reduction in crime — which, after all, harms the very people they seek to help.

### ***The Selection of Case Studies***

Given the ever-present threat of displacement and the implementation difficulties discussed above, it should not be surprising that situational projects sometimes fail. Indeed, the history of Criminology is littered with failed attempts to reduce crime. What makes situational prevention interesting is that it so frequently works. This explains the present volume's emphasis on success. Many of the studies included report substantial reductions (often 50 percent or more) in the offenses addressed. Only the last case study, Shearing and Stenning's description of crowd management in Disney World, which includes no evaluation, falls outside this definition. However, there can hardly be a criminologist in the

western world who has visited Disney World (and probably most of them have) who would not agree with the authors' conclusions about the security and safety of that environment.

The studies report deliberate efforts to prevent crime. Studies that have merely found a relationship between situational variables and crime have not been included. While some of the studies reprinted were not undertaken explicitly within a situational prevention context, their approach and methodology qualify them for inclusion.

As explained in the Preface, deciding which studies to include was more difficult for this second edition of the book than for the first one, because there are now so many more successful projects to choose from. In some instances, the measures were so straightforward and the evaluation so unproblematic that little academic purpose would have been served by reprinting the original paper. Where there was a choice between similar studies, those that dealt with displacement or that permitted comment (in the editorial note preceding each study) on some other important issue were selected. Some reports or articles on important successes, including the prevention of airline hijackings, could not be included without major editing which was not a practical possibility.

An important consideration governing the choice of studies among the remaining eligible ones was the need to demonstrate the generality of situational prevention by including studies that covered a variety of environmental contexts and offenses. Environmental contexts covered include private homes, shops, post offices, convenience stores,

**TABLE 3**  
**THE SIXTEEN OPPORTUNITY-REDUCING TECHNIQUES AND**  
**ILLUSTRATIVE CASE STUDIES**

<i>The techniques</i>	<i>The case studies*</i>
1. Target Hardening	1, (15)
2. Access Control	2, (6), (11)
3. Deflecting Offenders	3, 4,
4. Controlling Facilitators	5,6,7
5. Entry/Exit Screening	8
6. Formal Surveillance	9, 10, 11, 12, 13, (3), (15), (21)
7. Surveillance by Employees	14, (7)
8. Natural Surveillance	15, 16, (4), (11)
9. Target Removal	(7),(14)
10. Identifying Property	17
11. Reducing Temptation	18
12. Denying Benefits	19
13. Rule Setting	20, (21)
14. Stimulating Conscience	22**
15. Controlling Disinhibitors	21
16. Facilitating Compliance	23

\*Parentheses indicate secondary illustration.

\*\*Case Study #22, concerned with the design of the Washington Metro illustrates use of all techniques.

parking facilities, public telephones, street markets, night life and red light districts, leisure complexes and different forms of public transport. The offenses covered include auto thefts, welfare fraud, toll fraud, burglary, robbery, employee theft and shoplifting, drunkenness and assaults, vandalism, graffiti, soliciting, fare evasion and obscene phone calling.

Finally, it was important to include examples of all sixteen opportunity-reducing techniques. All are in fact represented, though not equally. Not unexpectedly, it proved easier to find examples of the use of well-established techniques such as target hardening and formal surveillance than of the more recent techniques falling under the general category of "removing excuses." The sequence of studies in the volume was largely determined by the techniques illustrated (see Table 3).

### Notes

1. Coleman (1985:16) is quite mistaken in describing the Home Office studies as being undertaken "to refute Newman's thesis." On the contrary, the limited support for his ideas provided by this research was a considerable disappointment to the researchers involved who included the present author.
2. The classification of 16 situational techniques makes a distinction between controls on facilitators and on disinhibitors (Table 1).
3. Partly due to concerns raised by Wortley (1996) and Newman (1997), some further changes have been made here in Clarke and Homel's classification. Specifically, "removing excuses" has been substituted for "inducing shame and guilt," and "stimulating conscience" for "strengthening moral condemnation."
4. This work on slug use was undertaken in the Criminal Law Education and Research Center of New York University, under the direction of my colleague, G.O.W. Mueller, now at Rutgers. Sitting in his office is one of the old parking meters without slug-rejecter or coin window. Would that more criminologists had such tangible evidence of the practical value of their work!
5. The Insurance Institute for Highway Safety (1995) has been pursuing an alternative solution to this problem with some success by lengthening the yellow signal and/or the period during which the light is red in all directions.
6. As mentioned in the editor's note to *Case Study #5*, Lowman (1992) found extensive displacement of prostitution into nearby streets when a similar street-closure scheme was introduced in Vancouver. This seems to have been due to the Vancouver prostitutes' need for money to support drug habits. The implication is that similar preventive actions may have different displacement effects depending on the precise nature of the settings and offenders involved (cf. McNamara, 1994). A further example is provided by Curtis and Sviridoff (1994) who argued that street-level drug enforcement undertaken by police in three different areas of New York City had varying displacement effects because of differences in the social organization of the drug selling enterprises.
7. In line with this reasoning, Eck (1993) has postulated that displacement follows a "familiarity decay" function, in that it is most likely to involve similar times, places, targets and behaviors to the offenses blocked. Bouloukos and Farrell (1997) have taken this line of reasoning one step further and have used the concept of familiarity decay together with that of "crime scripts" (Cornish, 1994) in arguing that displacement is less likely to occur when repeat victimizations have been prevented.
8. Similar reductions in motorcycle theft have been reported in Britain (Mayhew *et al.*, (1976), Holland (Van Straelen, 1978) and Madras, India (Natarajan and Clarke, 1994) following the enactment of helmet laws.