



## **Risky Facilities: A New Crime Concentration Concept**

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### **Introduction**

A very important principle of crime prevention is that crime is highly concentrated on particular people, places and things. This suggests that focusing resources on these concentrations will yield the greatest preventive benefits. Researchers have been developing concepts that capture different aspects of this concentration, including:

- Repeat offenders (who commit a disproportionate amount of total recorded crime)
- Hot spots (places where many crimes occur)
- Repeat victims (who suffer a series of crimes in a short time span)
- Hot products (which are stolen at much higher rates than other products)

These concepts cover several different kinds of concentration, but they fail to capture one important phenomenon, which is that (SLIDE 1) “for any group of similar facilities or establishments (for example, bus shelters, car parks or pubs), a small proportion of each group accounts for the majority of crime experienced by the whole group.” John Eck and I believe that this is a highly general phenomenon and we have suggested it should be called “risky facilities”.

The concept, if not the name, will already be familiar to many of you. After all, Oscar Newman established the empirical validity of defensible space partly by comparing the varying crime rates of apartment buildings of differing heights and sizes. However, what is now clear is that all facilities, not just apartment blocks, vary considerably in their rates of crime and disorder. Second, it is also clear that these variations in crime can sometimes be very considerable. Lastly, the concentration of crime is often so great that for all practical purposes the majority of the facilities in any group can be safely ignored whereas the others require considerable preventive attention.

These facts make the concept of much greater general value and I believe that identifying it and naming it will assist the development of CPTED.

### *Different from hot spots and repeat victimization*

I will explain later why I think this, but first let me say why risky facilities needs to be distinguished from hot spots and repeat victims. Risky facilities are sometimes identified as “hot spots” in an analysis of a city’s crime map. Examples would be hospitals, schools and train stations. But treating these as undifferentiated hot spots is to miss an important opportunity for analysis: A comparison of the risky facilities with the other members of their group (for example other schools or hospitals) could reveal many important differences between them, which account for the differences in risk, and which might provide important pointers to preventive action.

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Risky facilities have also sometimes been treated as examples of repeat victimization, but this can be confusing when it is not the facilities that are victimized, but the people using them. Thus, a pub that repeatedly calls for police assistance in dealing with fights is not itself repeatedly victimized, unless it routinely suffers damage in the course of these fights or the staff are regularly assaulted. Even those directly involved in the fights might not be “repeat” victims, as different patrons might be involved each time. Calling the pub a repeat victim might be more than just confusing however – it might also divert attention from the role of poor design and management in causing the fights.

*Examples of risky facilities*

While John and I suspected that the phenomenon of risky facilities was very general, we needed to establish this through a review of the literature, but first we had to define “facilities”. People generally use this term to refer to large buildings and areas of land (often closed to the public) such as municipal rubbish dumps and water treatment plants. When they refer to “public facilities” they tend to mean libraries, hospitals, schools, parking lots, railway stations, shopping centers and so forth. We use the term for both these kinds of large facilities, but we also mean it to cover much smaller private and public establishments such as taverns, convenience stores, banks, betting shops, social security offices, and so forth.

Our literature search was not intended to identify every kind of facility where the concept holds, but only to show that the concept is of wide application. We looked for studies describing crime in facilities, and then looked to see whether the study contained evidence that a small proportion of the facilities accounted for a large proportion of crime experienced by the whole group. We did not define what we meant by a “small” proportion of facilities or a “large” proportion of the crime. This has not been done for the other forms of crime concentrations discussed above, though it is not unusual to see figures like “Five percent of offenders account for fifty percent of crime” or “Four percent of victims suffer forty percent of personal crimes” – and we were looking for similar proportions in the literature we examined.

Unfortunately, data were always not presented in this form, but instead the studies reported differences between facilities in crime numbers or rates – for example, “Four percent of banks had robbery rates 4 to 6 times that of other banks”. While consistent with “risky facilities”, these figures do not satisfy a key component of the definition – they do not demonstrate that a small number of high-risk banks account for a large part of the robbery problem. Even so, we identified many studies showing this kind of concentration, including (SLIDE 2):

- Convenience stores – A national survey found that 6.5% of U.S. convenience stores experience 65% of all robberies.
- Petrol Stations – Ten percent of Austin, TX, gas stations accounted for more than 50% of calls for drive-offs and drug crimes in 1998/9.
- Schools – Eight percent of Stockholm schools suffered 50% of the violent crimes reported in 1993/4. In another study, 18% of Merseyside schools in North-West England reported 50% of the burglary and criminal damage.



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- Shops – A national survey undertaken in 2000 found that 1% of 4315 small businesses in Australia experienced 66% of all crimes reported in the survey.
- Businesses – Surveys of businesses in Scotland show that 10% of them account for 40% of the business burglaries and almost three-quarters of the non-employee thefts.
- Public phones – A 1998 Merseyside study found that 20% of hoax calls to the fire brigade made from public telephone boxes came from just 3% of the phones, ie 33 out of 1189.
- Bus routes and bus stops – Andrew Newton recently showed that about 4% of Merseyside bus routes experience 80% of all reported crime incidents on bus routes and about 5% of bus stops experience nearly 30% of vandal attacks. Here is the bus shelter data (SLIDE 3).

*Explaining risky facilities*

At this early stage, we do not fully understand the reasons for risky facilities, but they include the following (SLIDE 4):

1. Location. Facilities located in high crime areas, perhaps where many habitual offenders live, are more likely to be crime risks. This is because offenders prefer not to travel far to commit crime.
2. Crime attractors. Facilities that draw in large numbers of offenders are crime attractors. Some pubs attract the criminal element whereas other pubs make strenuous efforts to discourage them. The essence of defensible space is to exclude offenders.
3. Hot products. A risky facility might contain the types of targets that are particularly “hot”. Thus shops that carry frequently shoplifted items such as cigarettes, liquor, disposable razors, batteries and designer jeans, will have much higher rates of shoplifting than others.
4. Poor management. Owners or managers of most facilities try to regulate the conduct of the users and the employees. When they do this inadequately a risky facility can develop.
5. Poor design. As everyone here knows, the physical design of a facility can provoke or permit misconduct. This is basic premise of CPTED design, made famous by Oscar Newman’s concept of defensible space.
6. Large size. Finally, some facilities contain many targets. Thus some car parks have high numbers of cars thefts simply because they are so large. It is therefore always important to take account of size. For example, in car parks the rate of car theft can be calculated per 100 parking slots.

Here is an example that comes from a study of vehicle related crimes in car parks in Nottingham city centre (SLIDE 5). Just one large car park (Royal Moat House Hotel) accounted for 25% of the 415 crimes reported for all nineteen car parks in 2001. This represents a high concentration of crime, but even so, this car park did not have the

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highest risk of crime per 1,000 parking spaces. Four other car parks (three of them quite small) had higher crime risks per 1,000 parking spaces.

You will note that the risk of vehicle-related crimes for these car parks varied from 0 nearly 550 crimes per 1000 spaces – this is a huge variation with important preventive implications:

- First, improving the security of just one lot – the Royal Moat House Hotel – could make a substantial dent in the overall statistics of car park crime in Nottingham.
- Second, the risks of crime in many of the lots are so low that they could probably be excluded from any crime prevention initiative.
- Third, the unacceptably high risks of crime in some of the small parking lots could probably be reduced by basic improvements in security.

*Importance for CPTED*

I hope you agree that the concept of risky facilities is of wide application and that it has important implications for thinking about prevention, particularly for CEPTED. What we now need is more research on different kinds of facilities to explain their variations in risks of crime and disorder. Identifying and naming the concept should help attract the attention of researchers, who until now have neglected CPTED. After all, large programs of research have been developed around the concepts of repeat offenders, repeat victims and hot spots. Research interest is also rapidly developing in hot products, particularly in the scope for “crime-proofing” these products. We might expect the same build-up of research around the concept of risky facilities.

The work on convenience store robberies undertaken in the United States illustrates the research that is needed. A review published in 1997 identified fourteen studies of convenience store robbery (there would be more by now) and listed the main preventive factors that were identified. As you can see from the table (SLIDE 6), many of the factors relate to the layout and design of the stores, but others have to do with the store’s management. One result of more research on risky facilities would be to document the interplay between not just good design and good management, but also in many cases, good policing. In turn, this will help to broaden the focus of CPTED and strengthen its links with the closely related fields of situational crime prevention and problem-oriented policing.

Another useful result of undertaking research on risky facilities will be to focus more attention on the process of change – how to improve the design, management and policing of existing facilities. The usual approach has been to provide advice or guidelines based on research or best practice, but this assumes that the owners or managers are willing to accept some responsibility for reducing crime and disorder in their facilities. This is not always the case. Quite frequently, they will see this responsibility as resting solely with the police. Or they might deny the link between their management practices and high rates of crime. Or they will rely on insurance to cover any major costs of crime. In all these cases, pressure for change will need to be applied. There are several ways to do this, including (SLIDE 7):



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- “League” tables of risk. By publishing the risks of theft for different cars, the British government persuaded reluctant car manufacturers to improve the security of frequently stolen models. In the same way, publishing league tables of calls for police service from local motels or crimes in local parking lots could force managers to act.
- Certification programs. The police or local authority might certify premises and facilities for their security. These certification programs could be voluntary or compulsory. Police in the U.K. operate a voluntary safe car parks scheme of this kind.
- Voluntary codes of practice. The managers or owners of a class of facilities in a particular region or locality might agree to follow certain practices designed to reduce crime. Examples would be the “accords” made between the managers of pubs and clubs in entertainment districts in Melbourne, Surfers Paradise, Geelong and elsewhere in Australia to reduce drink-related violence.
- Performance bonds. Police in the U.S. are beginning to experiment with performance bonds. In lieu of taking legal action to close down a high crime facility, such as motel or parking lot, they obtain a legally binding agreement (a “performance bond”) from the facility that it will significantly reduce crime within a specified period. If it fails to do so, the owners are required to pay an agreed fine to the city.

Recently, the Oakland police in California entered into an agreement with a motel chain that it would significantly reduce crime and disorder at one of its problem motels in the city. This agreement was guaranteed by a performance bond, which required the chain to pay \$250,000 to the city if the goal were not reached within two years (by March 2003). It was left to the motel chain to decide which security measures to introduce and it decided to upgrade lighting and fencing, replace the managers and security guards, conduct pre-employment background checks on all new employees, establish strict check-in procedures with a list of banned individuals, and prohibit room rentals for more than 30 days. The table shows the results of this highly successful initiative, which earned the project the Herman Goldstein Award for Excellence in Problem-Oriented Policing for 2003 (SLIDE 8).

### **Summing up**

In closing, I should note that the kind of concentrations represented by risky facilities, hot spots, repeat victimization and hot products are not confined to crime and disorder, but are found universally. A small portion of the earth's surface holds the majority of life on earth. Only a small proportion of earthquakes cause most of the earthquake damage. A small portion of the population holds most of the wealth. Probably a small number of architects gain the bulk of architectural commissions. This kind of distribution is commonly referred to as the 80-20 rule: 20% of some things are responsible for 80% of the outcomes. It may not be exactly 80-20, but it is always a small percentage of something or some group involved in a large percentage of some result.



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So in this sense, the concept of risky facilities is nothing new. But identifying it and naming it should have several benefits for CPTED, particularly by attracting more researchers into our field. The studies they conduct of different facilities will extend the application of CPTED and clarify the relationship between design, management and policing. This in turn will encourage CPTED theory to pay greater attention to these determinants of crime risk. It will also result in more attention being given to ways of persuading reluctant managers to reduce crime and disorder in their facilities. Above all, I believe it will result in many more documented CPTED successes.