

Urban security : preventing incivilities and crimes to encourage more walking in public areas in OECD countries.

Samuel Martin, Frédéric Murard, French Ministry for Ecology, Energy, and Sustainable Development.

Centre for the Study of Urban Planning, Transport and Public Facilities.
9 rue Juliette Récamier
69456 Lyon cedex 06
France

samuel.martin@developpement-durable.gouv.fr
frederic.murard@developpement-durable.gouv.fr

Abstract :

Security issues appears to be fundamental in the construction and implementation of a pedestrian-friendly policy. Today more than ever, local authorities are concerned by urban security, beyond the institutional and strictly criminal framework. Indeed, actions in the field of security now fits in the broader urban policies, resulting from a complex set of mechanisms contributing to the same overall objective : urban security is a shared target, synonymous with public tranquillity and peaceful enjoyment of public spaces for pedestrians.

Pedestrians are the most vulnerable public space users in cities, because of their exposition to others without having an artefact around and because of their limited speed to run out of danger situations. Drivers and public transport users are protected by vehicle cabins and bikers can get enough speed to run away quickly. Consequently, security is among the most important factors people consider in the decision of walking.

Now Security is a very complex issue and pedestrian are very sensitive to many factors affecting their perception of security: legal framework on crime and vandalism, surveillance and police presence, social features of the area (sense of place, social ties and integration, solidarity, etc.), urban facilities (lighting, furniture and vegetation design and location) and urban features (density, land uses distribution, street layout, etc.).

These concerns affect the design, management and use of urban space: the inclusion of this issue raise questions and new methodological needs. This paper intends to focus on strategic and operational propositions related to urban security issues likely to encourage more walking in public areas.

Samuel Martin :

Engineer from Ecole Nationale des Travaux Publics de l'Etat and architect from Ecole Nationale Supérieure d'Architecture de Lyon.

He is a project manager CERTU - Centre for studies on urban planning, transport, utilities and public constructions. He is responsible for developing recommendations for the design of public spaces, particularly pedestrian-priority areas.

Frédéric Murard :

Engineer from Ecole Nationale des Travaux Publics de l'Etat. He is a project manager at CERTU - Centre for studies on urban planning, transport, utilities and public constructions.

He is the technical project manager of the French "street use code" programme, a participative process involving representatives from institutions and associations, launched in 2006 to modify regulations by adapting them to the practices in urban areas.

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What is at stake in urban security?

Urban safety may reflect different and sometimes contradictory aspirations, which makes the concept of security a difficult concept to grasp in its entirety. In this chapter, we will use the term, 'incivilities' in reference to unpleasanties encountered in ordinary public space. These are behaviours which contribute to the bad quality of the urban environment. The most common incivilities can be placed into the following categories :

- Minimal damage, such as mailboxes potholed, broken light globes in staircases, garbage fires in a hallway, etc;
- Garbage and abandoned objects in public spaces;
- Absence of politeness or deviation from the code of politeness;
- Challenges, threats or insults;
- Public tension pertaining to the use of space, generation of smells and sounds, etc.

While the aforementioned incivilities do not necessarily constitute 'illegal behaviour', surveys and studies of opinions have shown that they are systematically associated with a long-term effect on pedestrian behaviour and perception of public safety. Given that incivilities are symptoms of urban dysfunction, safety issues should ultimately involve stakeholders in the design, planning and management of public spaces. Current strategies which are used to limit disturbances and their consequences stem from the so-called *Environmental Approach of Crime Prevention*.

Preventing crime through urban planning and management

Strategies employed to address issues pertaining to urban safety are often based on a common assumption: that the environment can somehow affect the likelihood of a criminal act taking place, induce fear of aggression, or the feeling of being unsafe. The *Environmental Approach of Crime Prevention* on which the foundations of urban space development are based, has been the result of historical development.

Origins

The concept that a close relationship exists between security and the features of an urban environment was first proposed by Jane Jacobs in her well-known publication, *The Death and Life of Great American Cities* [Jacobs, 1961]. According to Jacobs, the main criterion for a successful urban development project is that the pedestrian is given priority and made to feel perfectly safe on any given street. This can be achieved by designing the streets in such a way that enhances both the urban environment and human presence.

Following the work of Jane Jacobs, Oscar Newman, a professor of architecture at Columbia University, strived to develop some practical principles of spatial planning in favour of achieving increased safety. In 1972, Newman also published a book, *Defensible Space*, where he defined the architectural principles required to achieve what he termed a 'defensible space'. The main objective of this theory was based on increasing natural surveillance so that the inhabitants of a given city, themselves, become the main bodies that ensure their own security. This new approach

to crime prevention acquired the name, *Crime Prevention Through Environmental Design* or 'CPTED'.

In Europe and particularly Great Britain, the principles of CPTED are highly regarded. Given that the founding principles of CPTED were based on security practises in urban areas of social housing, the methods pertaining to situational prevention (Table 1) were developed by Britain's Home Office Research Unit and promptly integrated into public policy in its fight against crime [Clarke,1980; Coleman, 1985; Clarke, 1997]. Techniques that reduce the opportunity for crime, which were once considered difficult and impractical, have progressively evolved to become an increasingly important part of crime prevention policies in UK.

Table 1. Twenty-five techniques of situational crime prevention [Clarke & Eck, 2003]

<i>Increase effort</i>	<i>the</i>	<i>Increase risks</i>	<i>the</i>	<i>Reduce rewards</i>	<i>the</i>	<i>Reduce provocations</i>	<i>Remove excuses</i>
1. Harden targets		6. Extend guardianship		11. Conceal targets		16. Reduce frustrations and stress	21. Set rules
2. Control access to facilities		7. Assist natural surveillance		12. Remove targets		17. Avoid disputes	22. Post instructions
3. Screen exits		8. Reduce anonymity		13. Identify property		18. Reduce emotional arousal	23. Alert conscience
4. Deflect offenders		9. Utilise place managers		14. Disrupt markets		19. Neutralise peer pressure	24. Assist compliance
5. Restrict the use of tools/weapons		10. Strengthen formal surveillance		15. Deny benefits		20. Discourage imitation	25. Control drugs and alcohol

Developments

Towards the end of the 1980s, a second generation of CPTED which was less materialistic and technical than its parent emerged in North America. In its derivative, the actions of situational prevention appear to be integrated into a broader policy defined by a strong social component and the greater involvement of inhabitants. The *Safe Cities* movement which eventuated therefore, led some cities to develop and encourage participatory approaches by its inhabitants, where the quality and safety of a public space was the shared responsibility of all its citizens. The City of Toronto and other Canadian cities have since lead the way in safety practises dictated by the new generation CPTED [Wekerlé, Whitzaman, 1994; Institute for the Prevention of Crime, 2008].

Most experts and practitioners now agree that a combination of both social prevention and situational prevention is required to achieve an optimally safe public place.

Video surveillance

A number of particularly common ways to improve pedestrian security in OECD countries include enforcing appropriate crime and vandalism regulations, providing increased or innovative lighting, increasing the number of security staff and installing Video Surveillance (VS). While VS is potentially one of the fastest spreading technologies amongst OECD member-countries, its use in improving security is controversial given that there are several legal issues related to protecting the integrity and privacy of people, usually a constitutionally recognised right. While VS is most commonly used in public transport and transport stations, they become controversial when installed in an urban space. In the latter instance, the use of VS is restricted in various countries.

The use of camera systems by the Police

While Closed Circuit Television (CCTV) or camera footage is used to tackle conspicuous, anti-social and criminal behaviour, police now actively use CCTV systems for gathering information as they enable incidents to be previewed in real-time. Cameras are often linked as a part communication and information gathering networks, which includes radio links, links to pager systems and/or direct phone links between camera operators, control room police and other security staff. Often, CCTV cameras are used as a means of monitoring town centres and can save police resources by identifying instances where police responses are not required ('false alarms') or be used by the police to co-ordinate an appropriate response when required. CCTV cameras can be used successfully to provide discreet surveillance of high crime areas and dangerous locations and can be used as a means of gathering evidence to direct investigations and secure convictions of offending individuals.

What works?

There is relatively little research to assess and compare the impact of environmental approaches on the expression of insecurity. The term "incivilities", do not necessarily convey the same message to all stakeholders within a community. That is, there is currently no consensus on what constitutes a 'safe' place. Any assessment of an urban development, to be comprehensive and efficient, should take into account the fact that security issues are characterised by a number of factors and forms. Consequently, strategic and operational propositions are highly dependant on the local context to which it is applied.

Difficult assessment

The existing studies seem to shade the effect of the preventive strategies related to urban planning [Sherman et al., 1997]. When evaluations of safety within an urban space are perceived to be positive, the improvements in safety are globally linked with better living conditions. In these instances, it remains difficult to assess to what extent specific measures have contributed to the improved safety standards of the development [Levan, 2006]. Moreover, assessments on safety are often carried out on isolated cases, which makes it impossible to conduct a fair assessment given that scientific rigor requires individuals to identify continuities between "means" and "results" of practises or see how these measures operate in different contexts. Practically, the effectiveness of specific security practices is particularly difficult to predict.

Effects of video surveillance

Research and evaluations have been previously conducted to determine the deterring effects of CCTV. Research has shown that the effects of CCTV are not obvious, but varies depending on the type of space in which it is employed. CCTV has been shown to be effective in closed places for example, but imaging technology has little impact in open areas or busy spaces [IAURIF, 2008]. Therefore, the usefulness of video surveillance should be discussed on a case by case basis, particularly with regards to its contribution toward general security in a city plan and its implications in the management of public spaces.

The Effect of video surveillance on crime

The effectiveness of cameras or CCTV may depend on two factors:

- The first factor takes into account the nature of the area under surveillance (large and complex versus a small and simple).

- The second factor takes into account the nature of the offence. That is, if the crime is committed surreptitiously, and the extent to which an offence is either impulsive (i.e. rowdy behaviour) or planned (i.e. bank robbery).

Given the above, it is likely that cameras are most effective when used in confined areas, or when coverage is extensive. Further, planned and relatively conspicuous behaviour is most likely to be detected by CCTV footage.

Effects on property crime

There is evidence to suggest that the use of cameras in particular areas has the tendency to reduce property crime - particularly burglary. The observed reduction in property crime appears to be achieved with no apparent displacement of other offences to surrounding areas or increasing the incidence of different types of offences.

Effects on personal crime

The effects of VS on personal crime, such as assaults, rape and murder are less obvious. In large metropolitan areas, cameras have had very little effect on reducing overall levels of assaults and woundings, despite being used to prompt many arrests. It is suggested that the cameras have a greater effect in reducing the severity or seriousness of a personal attack rather than completely preventing the offence – given that these are often fuelled by alcohol and the impulsive behaviour which illicit substances bring about. Instead, the surveillance cameras have a more prominent role in providing evidence to direct investigations and secure the swift convictions of offenders, thereby reducing costs associated with investigations and prosecutions.

Effect on perceived safety benefits

Several studies have also looked at the impact of CCTV on the public's perception of safety. Surveys have found that after the introduction of the cameras, people who were aware of the locations of the installed cameras felt safer in the city centre streets at night. This effect was not noted by the undaunted individuals who regularly used the city centre at night or by individuals who were unaware that the cameras existed.

Recommendations at a strategic and operational level

Taking urban safety into account is a process which not only depends on the intended use of a development and its functions, but also on the physical environment and the institutional context in which it is introduced. For this reason, there is no standard practise in achieving urban safety which can be applied universally. Nevertheless, there are various guidelines which exist at different local levels which make it possible to state a number of general principles that can be used to guide the questioning of practitioners and decision makers.

Taking urban safety into account when developing a policy

Achieving urban safety and developing effective safety-related policies requires the input of various professionals and calls on the skills and experience of the community including those in charge of public order and crime prevention, technical services, socio-educational organisations, public transport personnel, residents, architects, planners, urban designers and decision makers. Field observations have shown that there exists a relationship between the level of input from community members and the overall quality of public space and the level of security ultimately achieved [Wyvekens, 2006]. Eliminating insecurity within a public domain often involves promoting vitality and facilitating the attendance of as many people as possible to a given space. As stated by Jane Jacobs, public spaces are successful when they encourage a wide range of activities and various uses [Jacobs, 1961]. Urban safety contributes to formalise the intuitive relationship of reciprocity between quality of life and pedestrian mobility.

Some transferable principles

It is highly recommended that the experiences of other countries in achieving improved security for pedestrians be analysed and be used by the OECD nations as a starting point to develop a more complete vision towards improved public safety and pedestrian-related security. Specialised knowledge regarding achieving ultimate security for pedestrians and in safety in urban spaces is becoming available in published reports and web pages, one example being *Secured by Design*¹, the official UK Police initiative supporting the principles of 'designing out crime'. This document focuses on crime prevention at the design, layout and construction stages of homes and commercial premises and in turn, promotes the use of security standards for a wide range of applications and products.

Several handbooks and guidelines have so far been issued as a result of various crime prevention programs and through urban planning and management. They draw lessons from specific implementation programs and mention strategic principles required for achieving healthy urban designs and management, as well as mentioning the practices and dialogues which should take place between stakeholders. One such document is the "Working guide for planning and designing safer environments", which summarises the principles of the Toronto Safe City Committee [Wekerlé, Whitzaman, 1997].

An analysis is needed to distinguish the best practices that are transferable from one region or development to another. This is in fact the goal of the European standard on "Prevention of crime - Urban planning and building design" (CEN / TC 325), which is currently under development. The work of the European Working Group "Prevention of crime by urban planning" has helped bring to attention a number of basic principles of urban safety which are now agreed upon by most experts in the field (CEN technical report TR 14383-2 adopted by CEN in 1997).

The basic principles of urban safety identified in the CEN Technical Report (Annex D), extracted from the handbook "Urban design planning and management for crime prevention" [, 2008]

- Strengthening the residents/pedestrians sense of belonging to an environment enhances their perception of safety since individuals tend to develop respect for their environment which reciprocates in having a sense of protection.
- The vitality of streets and public areas is a major factor which influences the prevention of crime as vitality generates a form of spontaneous surveillance. Encouraging the mixed use of a space such as for commercial, residential and recreation purposes, diversified activities which can take place at any given time, and hence increases the number of users present, thus increasing the likelihood of surveillance.
- Every measure concerning security should take into account the most vulnerable individuals in a population.
- Urban developments based on creating safer areas opposed to the outer world (perceived as a source of insecurity) are to be avoided because they will lead to exclusion and residential enclosure or inward oriented spaces.
- Places mainly used by users for temporary periods such as train or bus stations and interchange points are generally vulnerable to crime, due to the limited sense of belonging which individuals associate themselves with at these points. Therefore, these places should be carefully considered with respect to safety.
- To assist in crime prevention, planning and design should avoid creating deserted, undefined or secluded places, given that vandalism and other criminal acts tend to be concentrated in these areas. If unavoidable, these spaces should be monitored using security.
- A continuous urban grid and a clear layout of public places improves the ability of users to self-orientate and promotes feelings of safety. Visibility of pedestrian spaces and routes from surrounding buildings and streets assists in crime prevention and increases the perception of security.

¹ <http://www.securedbydesign.com/>

- A clear delineation of public and private space facilitates the management of areas.
- Planning and design of circulation routes to services and housing should carefully consider security and accessibility for all individuals in the community. If a particular route to a destination is not sufficiently secure, then an alternative, safer route should be provided.
- Poorly maintained, unoccupied and abandoned buildings or areas, promote crime and attract antisocial behaviour. Therefore, buildings and grounds should be constantly well-maintained, and any actions which can minimise the degradation of a site should be carried out. If a site becomes unoccupied or abandoned, then these areas should be carefully monitored given their ability to easily attract poor or suspicious behaviour.
- In some instances, in order to improve crime prevention it maybe necessary to support spontaneous surveillance (or organised surveillance, both of which can be implemented in multiple ways). The layout and structure of a development should be able to facilitate this type of surveillance and appropriate interventions when required.
- Electronic surveillance such as CCTV is not necessarily a solution to poor planning of urban developments. However, it is primarily useful only when it is utilised as part of a general security plan.
- Temporary developments and structures, such as construction yards, detours, temporary barriers and fences all produce discomfort and create potentially dangerous places and routes. Therefore, the implementation of temporary solutions during construction should be given careful consideration given that it may influence the perceived levels of safety and the potential for increasing the level of crime.

Video surveillance

A key recommendation pertaining to the use of video surveillance, is to initially establish a legal framework which dictates where and when the technology can be used. Using this video surveillance without having and adhering to proper legislation runs the risk of giving this method of security screening a poor public reputation. Notwithstanding, video surveillance should not be considered a ubiquitous or complete solution for security, particularly where social problems exist or where the urban design is unsafe.

Observed good practices in the use of CCTV:

CCTV appears to work best when it is integrated as part of a package of safety measures, particularly when used to monitor town centres. Camera systems should be fully integrated into police command and control strategies, and be used to assist decisions concerning the deployment of officers and how best to coordinate a response to incidents;

If a town centre has multiple side streets and other premises such as car parks, then multiple cameras and operators may be required to for the cameras to be an effective security screening tool. This has obvious resource implications. The use of pan/tilt/zoom cameras, placed strategically, may assist in achieving better coverage.

Care must also be taken when cameras come into effect, that street crime such as muggings, or armed robbery are simply not relocated to other poorly monitored areas where opportunities for such crimes exist

The effectiveness of security packages which include CCTV may diminish over time. In order to maintain its effectiveness, camera footage should be used as evidence when apprehending offenders. The success of cameras can then be publicised and used to deter potential offenders. The successfulness of CCTV should be consistently well publicised in order to help improve the perceptions of safety and deter offenders.

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