# Crime prevention through environmental design (cpted)



Crime Prevention through Environmental Design is a method of deterring unlawful conduct through deliberately engineering the setting in which crime is likely to be perpetrated. In this regard, Crime Prevention Through Environmental Design is a multidisciplinary approach to prevent criminal behavior through environmental design (Atlas, 2008). CPTED tactics and strategies depend on the ability to manipulate the criminal's choices that precede the crime. Importantly, to achieve deterrence effects of criminal behavior, CPTED strategies have been designed on the basis that they can influence offender's decision in regard to committing crime which precedes criminal acts. The essence of CPTED approach is underlined by Angel (1968) suggestion that crime settings can be influenced by: the creation or elimination of boundaries, decreasing or increasing accessibility, delineating territories and through enhancing surveillance by the police and citizenry. Therefore, CPTED can be seen as an approach to problem solving that takes into account the environmental conditions and the opportunities they offer for criminal behavior occurrence (Cornish and Clarke 1986). Thereafter, it utilizes those perceived opportunities responsible for causing crimes to control access, provide opportunity to see and to be seen and defines ownership while encouraging territory maintenance (Luedtke et al, 1970) CPTED uses a multiplicity of disciplines to foresee the offender's mindset and hence create an environment that deters criminal behavior. Crowe (2000) reports that the central tenet used to arrive at the strategies is the analysis of crime and the environment where it occur using an analytic question " why here". Furthermore, such analyses have proved that: crimes are specific and situational; crime distribution correlates to land use and transport

network; and offenders are usually optimistic and commits crime in place they know well (Atlas, 2008). Moreover, these analyses reveal that opportunities for crime arise out of daily activities and crime places that are often without observer. The strategies that are employed to achieve CPTED objectives are through the use of target hardening, natural surveillance, alarm and warning systems installation and access control. Despite the science being originally formulated by Ray Jeffery (1977), CPTED is studied within the works and findings of Oscar Newman and Tim Crowe. R Jeffery's model is now viewed as a multidisciplinary approach to crime prevention which strays from the parameters of security science by incorporating psychology, human anatomy, biology and ergonomics (Crowe, 2000).

Newman (1972) ascertained the two basic components of a defensible space. First, this space must enable people to see other people and to be seen themselves. This greatly reduces the inhabitants' fears because they are confident that a criminal can be viewed, recognized and detained. Second, residents should be willing to get involved in fighting crime, this involves nurturing a sense of control among the inhabitants; this will enable them to adopt an empowered attitude which facilitates the combat of crime especially within residential areas.

Following its inception, CPTED has advanced at a great pace. Some of the noteworthy advancements include: the broken windows theory by James Wilson and Kelling George which studies the impact that visible neglect, wear and tear in neighborhoods have on behavior, the environmental criminology paper by Patricia and Paul Brantingham which looks at crime through four elements: rule, a wrongdoer, a target and an opportune location https://assignbuster.com/crime-prevention-through-environmental-design-cpted/

with environmental criminology being the study of the last of the four elements (Goldstein, 1990; Cornish and Clarke, 1986). British academicians Ronald and Patricia Mayhew also advance the discipline by formulating their Situational Crime Prevention Approach which addresses the reduction of the chance to offend by enhancing the design and administration of the environment in question.

### Theory supporting CPTED in residential burglaries

There are number of criminology theories that justify and align to CPTED approach in relation to residential burglaries. Theories that support CPTED in residential burglaries tend to deviate long due reliance on the sociological and biological perspective to understand crime, and instead emphasis on the crime prevention incentives that reduce environmental opportunities for crime and criminal. The most appropriate theory is the defensive space theory.

### The Defensive Space Theory

This is a terminology used to describe an environment whose physical attributes building plan, location and function allows the occupants themselves to become key agents in safeguarding them. In other words defensive space is both a social and physical (sociophysical) phenomenon (Oscar Newman, 1972), which means that a housing unit is only secure if it's inhabitants intend to take on the role of safeguarding it. The theory emphasizes that a location is safer when its individuals possess a sense of responsibility for it; Newman puts it as " the criminal is isolated because his turf is removed". This means that if each space is owned and catered for by

a conscientious caretaker then a burglar will feel more vulnerable perpetrating his crime. (Newman, 1972)

In the defensive space theory there are four factors that constitute a defensible space: the concept of territoriality which is a sense of possession and control for a particular property, natural surveillance, which is the connection between a location's physical attributes and the inhabitants' ability to monitor what is happening, the physical space's Image or ability to convey a sense of security and Milieu which are other characteristics that may have an effect on security like nearness to a busy road.

According to the theory, housing projects that stir up territorial sentiments are usually effective in combating crime and defacement. Newman (1972) put it that through good design people should not only feel comfortable in questioning what is happening in their surroundings, they should feel compelled to do so. Any criminal should be able to perceive a watchful community monitoring his actions.

In the book Design Outlines for Creating Defensible spaces Oscar Newman outlined five basic principles of designing a defensible space. These basic principles are: the allocation to different groups the specific environment they are able to use and control, for instance the basketball court is best assigned to male teenagers. Second principle entails demarcation of space in housing developments to exhibit the zone under the control of specific inhabitants. Third, invokes the strategic juxtaposition. Fourth, incorporation of the streets within the direct influence of an inhabited setting and the embracing of building styles which eludes the stigma of irregularity that

normally allows others to make out the susceptibility. And fifth, involves seclusion of a specific group of residents (Newman, 1972)

### **Approaches in Initiating CPTED projects**

Research conducted in CPTED has revealed that the decision to indulge in criminal behavior or not to is more likely to be influenced by the criminal's perception of the risks of being caught than his evaluations on the reward or the effort necessary in conducting the crime. In line with the findings of this research, defensible space is then designed to reduce crime and the fear of crime while improving the quality of life.

In Crime Prevention through Environmental Design the four most widespread CPTED approaches are: natural surveillance or close watch, natural territorial reinforcement or fortification, natural access control or admission management and target hardening (Wood, 1961).

Natural surveillance (Kruger and Liebermann, 2001) in CPTED is achieved by increasing awareness by placement of facilities, activities and individuals in a way visibility is optimized and human interaction is fostered. Criminals in such a space feel scrutinized and self aware, this diminishes the chance of them engaging in unlawful acts in such a space. This strategy takes effect by cutting down the opportunities for engaging in unlawful behavior. In such a design streets are made intentionally wide so as to accommodate as many pedestrians as possible. In natural surveillance designs: Unnecessary walls are usually eliminated this is because they block the resident's line of vision, windows are positioned overlooking opportunistic points of entry and by closed circuit television (CCTV) is used to monitor suspicious individuals.

In access control, only authorized individuals are allowed access to areas which might be targeted by criminals. This can be achieved through: keeping private areas behind lock and key, strategically situating security personnel to scrutinize individuals before they are given access to private space, use of tall fences to restrict access, doing away with design elements that might provide access to private areas, for instance poorly situated balconies and by barricading ground level windows which can be easily broken into by criminals (Cohen and Felson, 1979).

In natural territorial reinforcements, personal space is distinctly demarcated and unauthorized movement is eliminated by demonstrating greater proprietary concern. This can be achieved by assigning area's to specific users, this makes trespassers prominent and hence easy to make out. The natural territorial reinforcement strategy of crime prevention can be attained through the implementation of: Prominently displaying alert and security signage, scheduling activities in common spaces, restricting unplanned activities and by preserving a well groomed a premise that conveys an active presence (Atlas, 2008).

### Target Hardening as a Strategy in Crime Deterrence

Target hardening is a security term that refers to the fortification of a building in order to minimize the threat of attack or theft (Clarke, 1992). A straight forward method of crime prevention, target hardening usually deters or delays an attack. It includes ensuring that all windows, doors and other possible entrances are properly locked, removing any natural vegetation that could harbor criminals or be used by criminals to access higher properties.

### **Practical Examples on the Successful Application of CPTED**

In the book Design Outlines for Creating Defensible Spaces written by Oscar Newman in 1972, he outlines a research conducted in the City of New York that revealed that high-rise apartment buildings had crime rates higher than in lower housing projects. He attributed this to the fact that in high rise buildings residents felt that they had no obligation to secure an area that is occupied by so many people.

In 1985 George L. Kelling the originator of the broken window theory was hired as a consultant for New York City Transit Authority (NYCTA) (Clarke, 1992). In this period David Gunn a researcher put in place robust measures to test the Broken Windows Theory specifically targeting vandalism and graffiti. From 1984 to 1990 the subway system was meticulously cleaned and service in line with the broken window theory (Crowe, 2000).

In 1990 due to the runaway successes of George Kelling's policies concerning graffiti and vandalism control, the implementation of the Broken Windows Theory was further intensified by his successor William J. Braton who became the chief officer of the New York City Police. Braton implemented zero-tolerance policies relating to fare dodging, easier arrestee processing methods and background checks on all offenders (Crowe, 2000).

Celebrated Mayor Rudy Giuliani and his police commissioner Howard Safir also implemented the strategy on a wider scale in New York City. In his period at the helm Rudy Giuliani had the police strictly enforce the laws against subway fare evasion, public drinking, public urinators and men who wiped the windshields of stopped cars and demanded payment. This led to

the crime rates of both serous and petty crime falling drastically for the next ten years (Clarke, 1992; Crowe, 2000).

In the late 1990's in Albuquerque New Mexico an initiative called the Safe Streets program was launched (Clarke, 1992). In this scheme it was reasoned that lawlessness on roadways had a similar domino effect in facilitating crime as graffiti vandalism in New York. Punitive measures were initiated to discourage the antisocial behaviors experienced there; this was followed by a steep decline in crime as reviewed by NHTSA and published in a case study.

An example that captures the definition of a defensible space is a United States Department of Justice experiment in Hartford Connecticut (Clarke, 1992). In this experiment streets were closed and police were assigned to each neighborhood in the city. These measures were implemented alongside new public housing plans that were designed to restrict access to the city. Surprisingly Hartford did not show any significant drop in crime. This is despite the private areas of St Louis having a much lower crime rate than the public areas; the underlying reason is speculated to have been in private areas in St Louis people had the capacity and the incentives to protect their defensible spaces (Luedtke et al., 1970; Clarke, 1992).

# Checklists for Investigating a Premises Compliance with CPTED Template Questions to Evaluate a Premise's Compliance with Natural Surveillance

This checklist aims at evaluating how well natural surveillance strategies have been implemented within the building:

- Has the premises installed CCTV cameras to monitor human activities?
- Where is the lighting situated along passage ways? What is the height
  at which the lighting is placed? Can people's faces be adequately made
  out with the current level of lighting?
- What is the level of glare from windows, smooth furniture surfaces or
  oil painted walls? Is it sufficient to cause a blind spot in people's vision?
  Have the windows been shielded from glare by shielded or cut-off
  luminaires?
- What is the type of vestibules used in the construction of the building's entry? Is it transparent or is it opaque in nature? Does it allow sufficient light to ensure good visibility?
- Is there a fence in the compound? What is the type of fence used (can it allow light through i. e. a chain link fence) or is it impervious to light?
- What is the proximity of the location to road? How busy is the traffic along that road?
- How to the residents of the premises leave their window shades? Open or closed?
- How are the windows positioned on the premises? Do they overlook areas that are a high risk of having a security breach?
- How is the landscape design in regards to facilitating surveillance over opportunistic points of entry?

## Template Questions to Evaluate a Premise's Compliance with Natural Access Control

Has fencing been used to restrict access to the premises? Is the fence
 high enough to prevent trespassers from jumping over it? Is there a

- gate separating the front yard from the back yard? Can it be locked? Is it usually locked?
- Were there any design features in the original plan of the premises
  that could provide unauthorized access to upper levels of the building?
  Are they still there? If they are still there, what steps have been taken
  avoid them being used to breach into the building?
- What steps have been used to secure ground level windows against breach?
- How many points of entry does the building have? Is it clearly identifiable?
- Template Questions to Evaluate a Premise's Compliance with Natural
   Territorial Reinforcement
- Are the activities within the premises spontaneous or are they planned? Are private activities restricted to defined areas?
- Where are the amenities i. e. seating and food situated in the building?
   Are they distributed over a wide area or are they placed in a central location?
- Are there any security signage displayed in the building? How prominent do the security signages appear?
- How well has the premises and the landscape around it been maintained? Does it communicate an active presence?

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