

Publication state: Japan
ISSN: 2423-8783

Publisher: J-INSTITUTE
Website: <http://www.j-institute.jp>

Corresponding author
E-mail: phy_1004@daum.net

Peer reviewer
E-mail: editor@j-institute.jp

<http://dx.doi.org/10.22471/criminal.2017.2.2.17>

© 2017 J-INSTITUTE

The Discussion of CCTV Effect for CRIME Prevention through Environmental Design(CPTED) in KOREA

Park Heon-young

Kyunggi University, Suwon, Republic of Korea

Abstract

Crime in Korea is becoming increasingly ferocious, elaborate and cruel with the development of the economy, and property crimes such as theft are becoming more careful and intelligent, making it difficult to arrest criminals. In particular, robbery and theft, which are considered as serious problems of crime, are a type of crime with a greater fear of crime than other crimes and need a profound discussion.

The trespass theft, especially, in spite of the seriousness of the problem, it is difficult to know the exact amount of the damage because it is not separately classified in the official statistics.

In addition, as the technology leaks of Korean companies increase every year, it is as urgent to set up a legal measure to protect technology as the research and development of cutting-edge industrial technology. According to the Korea Information Security Agency under the National Intelligence Service(NIS), the number of cases that attempted to leak Korean advanced technology abroad is on the rise gradually.

In particular, unlike the past trends in which the leaks occurred mainly in the fields of the IT, automobile, shipbuilding, and IT industries, the victims cover SMEs and research institutes currently, reaching the bio-industry for green energy development as well.

Therefore, this study will discuss the urban design through crime prevention through environmental design(CPTED) and the expansion of CCTV installation which is a key issue, as a countermeasure against crime in Korea.

[Keywords] *Crime in Korea, Crime Prevention, Crime Damage, CCTV, CPTED*

1. The Need for Study

It has been shown that people in Korea are investing considerable effort and cost, such as changing their life patterns, reducing social activities, installing various security devices, and even getting help from private security companies to minimize the exposure to crime. In addition to these behavioral responses, fear of crime seems to be threatening healthy sociality by promoting disbelief among people, ultimately negatively affecting the quality of life of individuals[1][2].

Thus, the importance of crime prevention has gone up in order to reduce the crime and fear of crime. Especially, CCTV has been

widely used recently as a tool for crime prevention to mitigate crime and fear of crime, after installing in Gangnamgu, Seoul, the capital of Korea, in 2002, resulting in that the effectiveness of CCTV has become widely known and the numbers installed is rapidly increasing through cooperation with local governments and police agencies[3]. Therefore, this study wants to investigate the use of CCTV, which is a key issue of CPTED in Korea.

2. CPTED Crime Prevention Measures

2.1. CPTED crime prevention definition

In recent years, Korea has been making cities for crime prevention and those who claim CPTED say that in order to build a city to prevent such crime, they have to deal with the design from the bench to the symbolic representations of territoriality. In other words, the organization of CPTED means the reconstruction of a social environment. It also includes the provision of physical defensible space to deter access by citizens. These ideas should be considered at the planning stage of a happy city, and urban designers should focus on the construction that prevents the isolation of the social community and the city[4].

In addition, the concept of CPTED assumes that proper design and proper management of buildings and environment can lead to reducing crime, fear of crime, and ultimately to improve the quality of life. In other words, it is aimed to increase the surveillance effect through the design and use of the environment, called a crime control strategy that safeguards and eliminates fear of crime in the entire community, the crime-prone areas, educational institutions, specific areas, transportation, etc., by combining physical design, participation of residents, and police enforcement.

Based on the claim of CPTED, the safe environment in the community society can be initiated by designing a physical environment that can positively affect human behavior, and created by the contributions from architects, urban planners, landscape and interior decorators and law enforcement officers.

2.2. CPTED crime prevention factors

According to Newman and Moffat, there are six basic elements that constitute CPTED; territoriality, surveillance(formal, informal), access control, image, activity support, and target strengthening[5].

2.2.1. Territoriality

Defensible spaces suppose that people defend and display their domain. A good design emphasizes the obvious difference of spaces between outside and inside, thinking it inspires people to express their desire for the realm. It is therefore important to make more private space which is distinguished from the

public place to design a successful residential project. In other words, territoriality means that people protect the territory they feel as belonging to themselves and that they have some respect for others' territory. There are many physical ways to advertise externally that the property belongs to them by showing fences, paved roads, installation of artwork, signs, good maintenance of building and gardening. It is fairly easy to identify intruders within a well-defined space.

2.2.2. Surveillance

Surveillance consists of natural surveillance such as surveillance to monitor crime through local residents and local resources, and police patrol and CCTV. Natural surveillance refers to activities that increase the opportunity for potential criminals to be observed by local residents. Official surveillance refers to an activity that increases the opportunity for criminals to be observed by local merchants and security personnel. It also includes police patrols. A representative of mechanical surveillance is CCTV. By installing CCTV, potential criminals know the possibility of their criminal behavior to be exposed, which means deter the opportunity for crime.

2.2.3. Access control

Access control means limiting the opportunities for crime by establishing border lines to clearly distinguish between public and private places. It means to restrict the access to crime by selectively distinguishing the exit from the entrance, or by installing a fence, a street lighting, or a boundary line.

2.2.4. Activity support

Activity support means strengthening the observation function of the streets by encouraging the use of the public in the area with the installation of recreational facilities and the installation of benches for hiking trails. Supporting legitimate activities in public space helps to hinder crime.

2.2.5. Image

Promoting a positive image and maintaining the environment on a daily basis is a positive signal to all users and maintaining the

function of an effective physical environment. The importance of this physical environment and the image of the surrounding environment has the effect of mitigating fear of crime and crime.

2.2.6. Target strengthening

It is an effort to prevent potential criminal targets from being harmed. This means that it makes difficult to commit crimes by utilizing the installation of locking devices, the installation of security windows, tempered glass, intrusion prevention alarms, and safety deposit boxes.

2.3. Examples of CPTED crime prevention

2.3.1. Japan

Japan has been conducting CPTED studies on housing and transportation. As for the application of CPTED in Shinjuku, Shinjuku Station, where Tokyo Metropolitan Government is located, serves as a traffic node of Tokyo, so it can be said that it is an area with a lot of commercial facilities and floating population along with many financial institutions. Due to these characteristics of Shinjuku, various types of violent crimes such as rape, murder, and robbery have frequently occurred in Shinjuku in the past. The city of Tokyo has been constantly striving to improve the image of Shinjuku, and as one of the measures, the concept of CPTED through CCTV has been introduced.

CCTVs installed in the central commercial area of Shinjuku generally have separate CCTVs installed to monitor general streets in addition to financial institutions and convenience stores so that the concept of CPTED is utilized not only for pedestrian safety but also for preventing traffic accidents. In addition to these CCTVs, Shinjuku also introduces an environmental design method that can induce natural monitoring of indoors and outdoors by decorating the exterior walls of public telephone booths with transparent glass. In the case of Roppongi Hills and Midtown, it is a district that reorganizes old towns and represents Tokyo's urban regeneration. Urban regeneration is one of the main concerns of CPTED, and we must look through it care-

fully as it is similar to our case that is currently undergoing an active urban renewal project.

First, in terms of CPTED, the common feature of these areas is that all the exterior glasses of buildings are designed transparently. This shows that it faithfully reflected one of CPTED's strategies to prevent crime through natural surveillance. Particularly, the common part of the building, such as the stairs, was placed where it is easily visible from the outside and the height of the veranda and the position of the window were designed to make it difficult for the criminals to enter. In addition, a number of emergency bells were installed in areas where security was weak, such as parking lots, and lighting facilities were installed at pedestrian aisles at intervals of 5 meters so that it is possible to adjust the distance of streetlights and the intensity of illumination to fit local characteristics[6].

2.3.2. United states

In the United States, there have been many attempts to prevent crime traditionally to protect one's own property. Crime Prevention CPTED through Environmental Design, which started in the 1970s, illustrates this phenomenon. These movements are creating fortress-like cities by using fences and walls as well as attempts at designing like building physical obstacles to prevent crime.

In the United States, the National Crime Prevention Institute provides CPTED standards and programs, and The Guide to the City Security Policy published by the American Urban Planning Association(CPA) is designed to apply CPTED technology to all cities. In particular, CPTED and security technologies are involved in the design of public buildings, public spaces, transportation, street scenes, urban design, communication network, and etc. Each province has established CPTED design standards and ordinances for various areas such as school safety standards, lighting and accessibility standards(Virginia), and nighttime retail crime prevention standards(Washington state), and it has been actively researched mainly by the US Institute of Justice.

It is already well known that the use of CPTED for alcoholics, drug addicts, and social outcasts in bus terminals, and homeless people in shopping malls around New York and New Jersey is highly effective in preventing crime.

3. Discussion

Despite the advantages of CPTED, the dispute over the use of CCTV, which play a key role of CPTED in Korea, is ongoing now. The issue over CCTV dispute can be said to originate from the conflicting opinions on CCTV installation and operation

On the positive side for CCTV, they argue that it is effective in eliminating certain types of crime, promoting immediate reactions to crime, and alleviating fear of crime. It also provides a deterrent effect by informing that crime is being prevented and monitored, and allows police to be alert at an early stage to prevent dangerous situations from further developing seriously[7].

On the contrary, those who have negative attitude see little or no effect on crime prevention and suppression of CCTV. In addition, they point out that there may be the infringement of fundamental rights such as portrait right, confidentiality and freedom of privacy, information self-determination, and privacy rights.

CCTV is also the result of social exclusion and targeting the public in vulnerable areas[8], criticized for the potential to infringe on personal freedom and being used to promote the oppressive forms of social control, and separating vulnerable groups and ignoring the freedom to use space by social control when using CCTV in public places[9].

4. Suggestion

However, this discussion is approaching the evaluation of the effectiveness of CCTV simply based on the crime prevention and deterrence. Since the actual purpose of CCTV is to reduce fear of crime and crime, so fear of crime is the issue as important as crime.

If the effectiveness of CCTV is assessed based on crime prevention and deterrence in the past, the value of CCTV should be improved because it is only a fragmentary evaluation of CCTV. It is also important to understand the relationship between fear of crime and CCTV when evaluating it.

It is required to approach CCTV in various ways in order to accurately understand the purpose of CCTV. In other words, if the preceding studies evaluate CCTV focusing on the aspect of crime occurrence and inhibition, it is also necessary to conduct empirical research focusing on reducing fear of crime, approaching with a different aspect.

5. References

5.1. Journal articles

- [2] Noh SH & Kim JS. An Empirical Study on the Fear of Crime in Korea. *Korean Journal of Victimology*, 6, 169-205 (1998).
- [3] Lee SC. An Analysis of Differences in Recognitions of Crime Prevention CCTV -Centering on the Fear of Crime. *Journal of Korean Public Police and Security Studies*, 7(1), 153-180 (2010).
- [4] Park JP. Crime Prevention through Environmental Design(CPTED): From Walls to Music. *Journal of Korean Public Police and Security Studies*, 5(2), 97-110 (2008).
- [5] Cozens PM & Saville G & Hillier D. Crime Prevention through Environmental Design a Review and Modern Bibliography. *Property Management*, 23(5), 328-356 (2005).
- [9] Reeve A. Risk and the New Urban Space of Managed Town Centres. *International Journal of Risk Security and Crime Prevention*, 3(1), 43-54 (1998).

5.3. Books

- [1] Garofalo J. Public Opinion about Crime: The Attitudes of Victims and Nonvictims in Selected Cities. U.S. Dept. of Justice, Law Enforcement Assistance Administration, National Criminal Justice Information and Statistics Service (1977).

- [7] Goold Benjamin J. CCTV and Policing: Public Area Surveillance and Police Practices in Britain. Oxford University (2004).
- [8] McCahill M. The Surveillance Web: The Rise of Visual Surveillance in an English City. Wilan (2002).

5.4. Additional references

- [6] <http://www.krihs.re.kr> (2017).

Author

Park Heon-young / Kyonggi University Ph.D.
B.A. Chodang University
M.A. Kyonggi University
Ph.D. Kyonggi University

Research field

- A Qualitative Research on the Necessity of Establishing Private Security Principles, Journal of Korean Public Police and Security Studies, 8(3) (2011).
- Improvement Plans of Education and Training System for Qualitative Improvement of Security Industry, Korean Society for the Security Convergence Management, 1(1) (2012).

Major career

- 2006~2009. Presidential Place of Republic of Gabon, Chief of Security.
- 2014~present. Korean Security Science Association, Executive Director.