



The role of urban region structures in crime developments

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Abstract

Unlimited urbanization that causes extraordinary developments in urban regions (the living environments for the majority of people worldwide in the future) results in extended violent behaviors, increase in unsecure living atmospheres and an unrecorded development in crimes yet. These inelegances mainly rise from the malformations seen in urban region structures. Extraordinary crime events is not only in contrast with social principals but forms the major source for mankind agonies, loss of human resources, despairs and a covering dark feeling in human communities. Some improper designs for cities including raster designs, irregular and out of order passages patterns that result in developing some insecure, dark and unordered corners and cause the criminals to escape more fast lead into increased urbanized crimes. The solution lays behind the theory of CEPTED that clarifies humankind dependence in his residential place and his interest to defend it. Anyway, a suitable designing pattern for private and semi-private residential atmospheres along with strengthening residents' feelings for depending on their houses as well as direct and indirect supervisions in formal and informal forms can lead the urban societies toward more secure cities for legal standing people and more unsecure atmospheres for the criminals. Regarding the importance of security and its mental affects in human societies it seems necessary to pay more attention to more suitable municipal designs with omitting left spots, enhancing citizens' cultural knowledge and optimizing old infrastructures in order to decline the steep ascending trend of crimes that threatens the security of people in urban regions.

Key words: urban forms, urbanized crime, urbanized defense, urban design pattern

Introduction

Urbanization trend in developing countries has faced an unnatural form causing to an extraordinary depletion for rural places for the view point of human resources. Therefore we in the recent decades felt a lethal strike to agricultural bodies and see a fast growing population rushing towards cities from the surrounding villages.

The identity and structural forms of cities in developing countries, including Iran, has led into physical expansion in urban territories and a very fast growth in their population.

The result is shown in an imbalance situation between the existing facilities and the needs that result in various types of tribulations in municipal management, accordingly (Esmaealzadeh, 2011). As Navidkia(2009) declares” security is an endowment that greases the lives so that insecurity [the absence of secure situations] disorganizes the structure of existence and the universe collapse (Navidkia, 2009).

In two recent decades one of the cores of municipal managers to regard has been dedicated to security issues in urban regions in order to effectively decrease crudities in these types of regions. The main reason for such a consideration is that security forms the pavement of economic, social and environmental developments and is mutually affected by these elements (Rahnamaee, 2007). From the consequences of security domination in a society and superficial strengthening the municipal structures we can by sure mention more daily working efficiencies, beautiful atmospheres that create cheers in the individuals, more effective existence for each individual in the community as well as much more enthusiasm for the investors that finally leads to more financial and economic growth in the society. On the other hand, insecure atmospheres repel the rich and the investors that in itself lessens job opportunities (Hosseinion2008). Anyway, a part of insecurity in cities come from crimes that are simply negative and resented social behaviors and place at the center of lawyers, criminologists, sociologists, municipal designers, penologistand praxeologists. Thus various types of researchers have been for a long time seeking for the ways to prevent criminal events.

Attempts to prevent crimes consist of a set of tactics, decisions and plans to avoid any type of guilt before an individual committing it. In the recent century, criminologists and geographers, emphasizing on this point that a crime is committed in a special place and a given time, have found that concentration on the time and the place in which a crime is committed can play a significant role in decreasing the amount of social delinquencies. Such an emphasize has resulted in a new theory in criminology based on city structures and municipal atmospheres. Environmental based designing is nowadays one of the most outstanding theories in this way.

The new theory believes that it is possible to enhance the quality of lives through a suitable environmental designing in addition to lessening the amount of insecurity feelings and delinquencies. This theory related crimes and the places in which they are committed. Therefore the main focus of it is on the location that a sin (here by sin I mean a crime) is committed.

Urban regions have been always considered as the main places for committing crimes by the criminals. Thus these regions constitute the major centers for the managers and the experts to plan to decrease the amount of various types of delinquencies. The main characteristic of such a planning is its focus on designing with the environment in municipal places to maximize the feeling of security and solace for the citizens (Kalantari2012).

Study background:

The existing methods for environmental based criminology are reflections of the principals mentioned previously. These effects are analyzed by different principals. These principals consider the relationships amongst crimes and the environment in different layers. Brothingam (1993) describes 3 levels for analyzing the principals in threemacro, meso and micro dimensions in the following form:

Macro level analysis:

Macro level analysis consists of some studies about expanding crimes in a country-wide scale including the states, provinces and cities. The first study in this issue was held on the late of 1820s in which the first map of crime distribution was drawn for French provinces. The results showed a heterogeneous distribution of crime throughout the country. In fact the distribution of crimes mainly depended on the type of the delinquency. Interestingly the most violent crimes happened in poorer rural regions whereas property robberies especially from houses were mostly seen in richer and industrial territories. Therefore, the researchers working on the plan concluded that poverty does not lead into property robbery but this is the life condition that make individuals commit a particular type of delinquency. However, the most advanced provinces were more prone to big scaled robberies.

Meso level analysis:

Meso level analysis consists of some researches in sub-regions or lateral places of cities or the capital city. These regions show a medium spatial intensity and population amount. Meso- intense regions cover the surroundings territories of the capital, their streets and even the individuals' addresses.

Social roots of environmental approach in designing plans go back to ecological activities known as Chicago Movement in early decades of 20th century. This movement accepted the living rights of each individual organisms as a proportion of the universe by a group of sociologists in Chicago University who tried to consider the ecological principals in perusing humankind behaviors. Their researches focused mainly on the trend of immigrations from urban regions to rural ones and the influences of such an increasing movement on criminal acts as well as on other forms of social disorders .

Another important scheme is derived from Jane Jacobs's paper (1961) who was also enthusiastic on studying on the immigration issue especially from rural regions to the urban surroundings but unlike Chicago protagonists his local analysis concentrated on streets. In his paper titled "life and death of United States major cities" on 1961 Jacobs claimed that the measures of designing in poor cities resulting in small municipal blocks, small

industrial towns, crossing streets and exhausted buildings can be considered as the reasons for increasing amount of social disorders. He declared that relying on crowded life styles in the absence of green open atmospheres will surely result in increased number of criminals. Using Northland locality in Boston as an example he describes that the territories with poor residents can change into rushing cheerful regions with no sign of any type of social disorder. However, because a majority of the people living in these localities generally break through the legislations, a supplying bilateral network in which strengthens them to commit crimes takes form preventing the locality to escape from the existing situation. Based on his observations Jacobs suggested a review in municipal designing measures emphasizing on the lonely feeling of the residents that creates a feeling of not having any right of possession per se. consequently we observe a variety of delinquencies. However, Jacobs (1961) proposed four different states in designing for urban regions:

- 1- First of all any type of facilities should become provided for these regions. In fact the consequences of industrial and commercial efforts must be reflected in residential regions so that we can observe all the parks to be crowded. Individuals must be able to communicate in every time of a day or night.
- 2- Cities must be divided into small blocks with optimum amounts of intersections so that people can reach any region throughout the city. Such a structure contributes a homogenous form to cities in which guarantee the existence of life spirit in any corner of the city with no left or died one.
- 3- There must be a complex of old and newly formed buildings to guarantee financial and cultural supports in these types of localities.
- 4- The intensity of population must be increased to the extent that building diversities can support them and no problem emerges in the way people communicate one another but facilitates them to communicate. He goes on to say that a high intensity of population matches much more with a formless globe. If we follow these principals in designing urban regions it may not only assist forming social networks, encouraging the individuals to hospitalize the strangers and having an indirect supervision on the locality but undoubtedly result in more secure feeling in the society. Furthermore, Jacobs presented some considerations for preventing crimes in the environmental based scheme for his aforementioned suggestions.

Micro level analysis:

Micro level analysis criminologically studies different layers of societies in some particular places. In this level of analysis officials often focus their attention on buildings, the places these buildings have been established, their view, amount of light, inner design and finally their security hard and soft wares. This kind of analysis is imitating an ecological model that divides all of the region into smaller parts to be able to more focus on the influences of environmental elements on the decision that individuals may take and the behavior they may commit. Therefore, it seems that the main focus of this type of analysis is on psychological roots of criminals' behaviors.

In his extended researches Clark (1975) concluded that various environmental elements can result in various degrees of crimes to be committed. He claimed that identifying the

potential criminals cannot be highlighted as the best solution for preventing delinquencies but we in this way must concentrate on rebuilding the socio-economic, environmental and organizational structures. This theory was soon extended as an integral one on positional and spatial criminology so that in a short proportion of time formed the executive principals for preventing crime committings. In this scheme criminals are regarded as active decision makers using the environmental data to or not to commit a crime. These decisions may seem logical if we look from the view point of the criminal praxeology who is seeking for the uppermost benefit in the time of committing a criminal behavior.

Crimes can be decreased by decreasing criminal prone occasions. This is not achievable unless by designing some types of atmospheres that induce criminal doings as wrong decisions. However proper backgrounds for committing any type of delinquency can accelerate the truck of criminal behaviors.

Clark's initial viewpoint is that some products are innately crime generating (i.e. they are in their nature made for criminal usages) and some are very attractive that catch the eyes for robbery (Wratley and Mazon, 2012)

The relationship between urban places and criminal acts:

In different societies, the measures used to determine an act as a criminal one strongly depends on a given societies' cultural, economic and developmental structures (Mafi2009). Therefore, a particular behavior may be considered as a crime in a given community whereas it is a possibly a cultural element in another. However, it is acceptable that any behavior that breaks the social elements is regarded as illegal and termed " a crime" in which is of a particular penalty to be compensated. However, we do not forget the role of social, economic and hygienic elements in creating a criminal act(Soltani, 1996).

Generally some types of acts such as murder, insults, suicide, addiction, robbery and sexual affairs are termed as "criminal acts". Degrees of these so called criminal acts vary from one city to another. The crowded cities and the crowded centers such as tourism and recreational centers are much more prone to criminal acts. Among all the susceptible places we can mention slums and inferior localities with their vast potential to receive the immigrants and their high intensity of buildings and populations.it is worth mentioning that urbanization does not necessarily result in delinquency per se but can provide the backgrounds for the factors that finally arrive to the gates of crimes. Cities though containing the best public services in the majority of countries but absorb most of the social disadvantageous too so that murder and unrest are two of the mildest ones maybe. For their absorbance of immigrates that is one of the most significant parameters in creation of criminal acts, more extended cities are prone to municipal wrong doings.

A vast amount of studies on the influences of locality and the section of city that a young man is living in have shown that the roots of juvenile delinquencies is a function of local elements so that this phenomenon is easily seen in the more inferior localities consisting of very small and unsecure houses (Wartley and Mazol, 2012).

Feeling security:

Generally speaking, freedom and feeling secure along with breaking the belts of frights and dangers are the most important needs in social lives that all of us are seeking for it. In this regard Imam Ali (Peace Be Upon Him) defines security as the most great blessing from God, cause of welfare and one of the inner goals of Islamic Republics. We should not forget that “security” and “feeling of security” are two similar but completely separate issues. In other words we may see security outdoors but may not feel it and vice versa.

An accurate look to increasing rate of urbanization proves that there have been many developments in dominating security in urban structures to provide the public with security feeling in social, economic, political and structural dimensions. Since security is supposed to be one of the principals in human sustainability the only way to increase public satisfaction and to maintain social capitals is to invest in the part of security in urban structures (Bamanian, 2009).

Key forms of cities resulting in criminal acts:

As previously mentioned the structural elements of a city can affect the trend of crimes. The key forms of cities that may cause criminal acts are listed below:

- 1- Raster structures make some escaping atmospheres for the criminals. In fact, at the recent few decades apartments have contributed a raster form to cities so that robbers can easily enter these structures and escape from each point they want. In addition, a raster structures cause a heavy traffic that threatens the security of citizens.
- 2- More solitude corners in the city lead to more insecurity for the citizens by providing criminal promoting positions. In fact no criminal can commit crime before the eyes of others. To decrease the possibility of any crime in these solitude corners one of the solutions is to provide the facilities for the people to haunt to these places. For a simple instance, in one hand at solitude alleys kidnapping is in high possibility but on the other hand we cannot always prevent kids not to play in the streets. So what is the solution? The solution lays behind designing some parks in each locality to encourage people to take their child to them to further increase the security situations for the kids to play and to prevent kidnappers get to their evil plan. Moreover because of their suitable environments make parents feel more secure.
- 3- Dark alleys are also one of the main places for criminal to commit their crimes. Alight environments will surely decrease the statistics of crimes.
- 4- Another complicated factor to increase criminal behaviors is environmental disorders that is the lack of artistic structures that make people to be confused especially in the crowded places (e.g. in squares that people are standing waiting for a ceremony to be established) the possibility of criminal behaviors increases. Environmental disorder may result from the lack of suitable laws in designing city structures in addition to social factors. Such a lack of legislation cause lead into disordered structure for cities that cause disordered patterns for the main passages and sideways. Therefore a weak public service is in hand that opens the atmosphere for criminals to dare to commit any type of crime and limits police to go after them.

- 5- One of the main factors helping any decrease in criminal acts in cities is establishing outer space defense systems for cities.

City defense:

We cannot deny the role of policies for preventing criminal acts especially in the lack of a strong judicial system to combat crimes. One of the most influencing mechanical strategies to prevent crimes is “crime prevention through environmental design” (CPTED) that was presented by C.R.Jeffry, an American criminologist, in a book with the same name in 1993.

CPTED is defined as “a suitable design for the environment that leads into a decrease in criminal occasions, an increase in frights of committing any crime and enhances the quality of life”. This definition is principally based on the theory that one’s behavior is influenced by its environment. This theory claims that in a proper atmosphere criminal will select committing a crime over other options. On the other hand it emphasizes that optimizing supervisory systems to present an optimistic image of the environment will undoubtedly lead into less criminal acts. Therefore one of the principals that can guide us to an optimized atmosphere is suitably designing the working and residential places to let the individuals choose among proper and improper options.

The scientists working on crime related issues believe that crime is borne of opportunities. They also believe that a criminal is a wise one and selecting a crime over other options is a rationale choose. These experts prove that influencing the environmental factors is more convenient than interpreting and combating man’s cultural, mental, social and economic depauperation to modify his characteristic. Therefore they believe that the solution of decreasing criminal bearing opportunities takes its way through suitable municipal designing.

Principals for CEPTED:

Defining a personal territory:

A living organism is always claiming for a personal territory and defends it before the others. One’s dependency on environmental elements is of different degrees and his behavior against these factors vary widely including ignorance of or dependence on them (Falahat, 2007). Studies show that some criminals knowing the importance of such an issue use its principals to assess the risk of a robbery. Therefore, designs should separate public, private and semi-public places to induce the feeling of dependency for people to the space they live or work. Such an induction encourages individuals to supervise a stranger while entering the territory they feel dependent on.

Supervisory strategies:

If a criminal feels eyes on himself even if he is not really under supervision, the possibility of committing a crime will calm down. A study on criminals’ ways of thinking, two parameters were proved to be effective in preventing them to commit a crime (a) lack of attractive signs and signalsand (b) supervisory systems. Burglars completely emphasize on

the supervisory role of the neighbors to prevent them. They recognize the residents as the most important supervisors in a locality.

Supervision is divided into three main categories:

- 1- Informal supervision: Here the residents themselves supervise the public, private and semi-public centers. Such a supervision is generally done through windows.
- 2- Organized formal supervision: This supervision is conducted through formal employees in private or governmental sectors such as those working in security councils or watchmen.
- 3- Mechanical supervision: that is conducted by means of surveillance cameras

Controlling entrance and exiting gates:

One of the most principal concepts in CPTED is decreasing the potential opportunities for an individual to commit a crime. This goal can be achieved only by confining the possibility for the criminals to attractive resources as well as increasing the risk of being arrested. Studies show more susceptibility of robbery for those centers with extra and unorganized entrance gates relative to those with limited and ordered entrance gates.

Protecting the atmosphere by taking pictures or recording films:

This section points to this theory that security and the ability to live in an atmosphere depends on the images we have from the atmosphere. This atmosphere can be our working place, home, our locality or the street we live in.

An individual's local identity is a portion of his personal identity. It means that besides developing the feeling of having a territory, a better protection of the atmosphere we live in induces the feeling of security so that the minimum wrong behavior is highlighted and strongly rejected.

Qualifying the materials:

This method is the most conventional one to preventing crimes and one of the elements of CPTED. This theory claims that we can confine the impacts of the crimes by enhancing the quality of security characteristics of materials that are susceptible to burglary.

Backing and supplying activities:

Utilizing new brilliant designs to encourage the residents to use the atmospheres is also one of the supplying activities that along with the other CPTED principals can increase supervising activities that result in preventing crimes per se (Mortezaee, 2003).

Materials and method:

We conducted a descriptive and analytical study by using library and documentary collected data. By an intensive literature review through books and published papers as well as searching different web based search engines we analyzed the relationship between city structures and types and amounts of committed crimes using CPTED principals. According to CPTED if we design our urban regions following the optimum structural designs we in a

short time will observe a fast decline in the amounts of crimes. In this study we introduced the executive scientific ways to contribute secure atmospheres to residential urban regions and the suitable strategies that will lead us to this goal by using CPTED elements.

Results and recommendations:

The most important strategies to be taken through an environmental based designing for increasing the feeling of security and enhancing the feeling of security in residential places especially in urban regions are as the following:

- 1- Suitable designing in structural forms of the buildings
- 2- Defining the territories of private and public spaces in buildings
- 3- Utilizing special entrance gates
- 4- Employing some clerks to guide individuals directly to the place they need
- 5- Defining each spaces territory by fencing around them
- 6- Blocking the ways that the public can achieve to roofs and uppermost floors
- 7- Defining home limits
- 8- Showing the possessing right of the properties to show the activities done in a territory
- 9- Conducting some activities that prove the possessing rights in an enclosure such as planting trees, fencing, attaching some types of signs, lightening, etc.

Limitations for using CPTED:

- 1- Lack of sufficient knowledge about CPTED principals in designers, managers and the public
- 2- Some resistances against any change. In one hand using the principals mentioned for CPTED needs a common management and in the other hand this is not the case in most situations, unfortunately. Therefore, there is generally a doubt in doing the aforementioned strategies.
- 3- Since a majority of the urban atmospheres are not built based on CPTED principals, any change or modification in these atmospheres will cost a lot of dollars. Furthermore, because of its high monetary exchange it will take a long time to change people's way of view about the field.

It is worth mentioning that the CPTED is of many advantages relative to physical acts by anti-delinquency police because this model aims to prevent the crimes before they are committed but police's acts are physically executed after the crime is committed. Infact police is more seeking for identifying the criminals and arresting them but CPTED is seeking for the strategies to prevent a person become a criminal.

Recommendations for developing security situations in urban regions:

- 1- Structural and physical enhancements in poorer and surrounding regions
- 2- Establishing a just system for distributing monetary resources amongst all of the citizens
- 3- Encouraging public proportion in developing, presenting and executing municipal designs

- 4- Developing a more suitable land use distribution (cultural, educational, hygienic and recreational services) so that all of the population can easily use them
- 5- Identifying the susceptible atmospheres to crimes and executing the necessary actions to change them
- 6- Following the environmental standards such as preventing any type of building activities in agricultural lands
- 7- Preventing any black market in housing market to provide a situation for everyone to be able to prepare a house especially for those who are living in the slums.
- 8- Providing the principal needs for the public especially their fresh water, food, house, income and security
- 9- Enhancing the old and exhausted textures
- 10- Developing the economic infrastructures and municipal services
- 11- Making some decisions for providing jobs and enhancing economic secure situations
- 12- Providing the least hygienic standards and insurance services for the public
- 13- Solving the problem of traffic and air, sound and visual pollution
- 14- Preventing the establishment of atmospheres without any defense by performing structural operations including changing atmospheric forms, enhancing the lights and the visual horizontal array, omitting the U shaped atmospheres by covering them to prevent the poor aggregating in them
- 15- Preventing badgers to be active next to huge trade markets through legal canals
- 16- Activating obsolete buildings, changing left buildings usage and/or fencing them

Conclusion:

In this research we investigated the possible strategies for increasing formal and informal supervisions for achieving a correct management to enhance security and its feeling among urban residents. In studying the relationship between city structures and committed crimes we undoubtedly observe a positive correlation. In some municipal atmospheres due to their special structures we observe a more possibility for delinquency activities. Sometimes a suitable municipal designing is considered as a strong preventing factor. Therefore using CEPTED methods and supervisory strategies along with controlling and preventing the living atmospheres are strongly recommended to prevent any type of crimes in urban regions.

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