The Role of Social Security Spaces of Traditional Iranian Cities in Urban Crimes Reduction: With Emphasis on CPTED* Approach

F. Rezaeifar[1], M.R. Pourjafar[2*], A.A.Taghvaea[3]

Abstract
Importance of security and sense of peace is a one of the most important factors of urban environment. Therefore, the necessity of security in urban spaces has caused the emergence of authentic theories like Defensible Spaces and Crime Prevention through Environment Design (CPTED)*. In this paper, various literatures related to defensible space theories have been reviewed and the related keywords have been defined. Then, the role of defensible urban spaces as a social capital in the reduction of urban crimes is examined. Further, condition of defensible spaces in traditional Iranian cities has been studied with reference to the city of Isfahan.

The research method is based on data and documents collected through field survey.The conclusion justifies the precedent of defensible space, in design and planning, as well as shaping historical cities. Safe and secure spaces which support social capital concept, under public surveillance and collective responsibility, works as an important aspect in reducing crimes hence; bringing about a state of stable urban security.

Keywords: City; Crime; Security; Iran; Traditional Cities; CPTED.

*Crime Prevention Through Environmental Design
1. M.A. in Urban and Regional Planning, Faculty of Art and Architecture, Tarbiat Modares University, Tehran, Iran. rezaeifar@modares.ac.ir
2. Professor, Faculty of Art and Architecture,(Corresponding Author's) Tarbiat Modares University, Tehran. mr_pourja@modares.ac.ir
3. Associate Professor, faculty of Art and Architecture, University of Tarbiat Modares, Tehran, Iran.

Introduction

Security is one of the basic human necessities. To create urban secured spaces-utilizing the competent planning and design - which have a peaceful sense for citizens is a necessity. In this way, architects and social scientists like Oscar Newman, Jane Jacobs, Sally Merry and other experts have accomplished many studies which led to develop theories like Defensible Spaces, Crime Prevention Through Environmental Design (CPTED). The concept of Defensible Space first emerged in 1960 that means that the urban security would be available once we make required implementation in order to create defensible space where people feel secured, peaceful and relieved. A kind of relief without sense of fear -exact or subjective fear - among citizens, free from all threat or danger which make a city, urban spaces, residential complexes, installation, public green spaces insecure. Spaces that are highlighted in the current study is the formation procedure of traditional Iranian texture and how they resulted in secured and defensible spaces which have been under surveillance with public responsibility. Residents' responsibility in effective surveillance of their environment is factors which help create defensible space hence; has caused feeling of responsibility and public supervision among residents.

Research Background

CPTED was originally coined and formulated by criminologist C. Ray Jeffery. A more limited approach, termed Defensible Space, was developed concurrently by architect Oscar Newman. His book ***Defensible Space: Crime Prevention through Urban Design*** published in 1972. His principles were adopted widely but with mixed success. The defensible space approach was subsequently revised with additional built environment approaches supported by CPTED. Newman re-presented this as CPTED and credited Jeffery as the originator of the term CPTED. Consequently, Newman's CPTED-improved defensible space approach enjoyed broader success and resulted in a reexamination of Jeffery's work. Jeffery continued to expand the multi-disciplinary aspects of the approach, with the last one published in 1990. Jeffery's CPTED model is more comprehensive than the Newman CPTED model, which limits itself to the built environment. Later models of CPTED could be developed based on the Newman Model, with Crowe's being the most popular one. As of 2004, CPTED was popularly understood to refer strictly to the Newman/Crowe type models, as the Jeffery model treated more as multi-disciplinary approach to crime prevention which incorporates biology and psychology, a situation accepted even by Jeffery himself (Jeffery, 1990). A revision of CPTED, initiated

in 1997, termed 2nd generation CPTED, adapts CPTED to offender individuality, further indication that Jeffery's work is not popularly considered to be already a part of CPTED.

Defensible space is a concept first proposed by the architect Oscar Newman- about 50 years ago in 1960 - and then developed further by Alice Coleman. Under the idea, crime and delinquency can be controlled and mitigated through environmental design. The idea is important because it relates an individual's environment to his or her expectation of crime in the community (Wikipedia, 2008). In the Park's idea, urban regions prevent progress and improvement of residents' motives and cause social digression. City framework has a deep effect on socio-cultural types of urban habitancy (Bayanlo, 2007:37). On the other hand, the defensible space is a concept which studies social behavior's effect on planning, design and architecture.

Defensible Space Factors

Correlation between environment and behavior brought about effective factors to interfere in environment as it has desirable effect on social and personal behaviors. Studies of Ibn-e-Khaldun and other researchers like Monteskio justify geography and natural environment's effect in changing behaviors (Ibn-e-Khaldun, 1974: 159 & Monteskio, 1984: 390-407). This

kind of evaluation at urban arenas defensible space factors have also been evaluated from different theorists; in Newman's idea as one of theorists expresses, there are four factors that make a defensible space:

- **Territoriality**, the idea that one's home is sacred.
- **Natural surveillance**, the link between an area's physical characteristics and residents' ability to see what is happening.
- **Image**, the capacity of physical design to impart a sense of security.
- **Milieu** (Newman,1996)

Defensible space relies on milieus and persons' abilities about surveillance of daily events. Newman found that there was a proximate relation between loss of milieu and visible surveillance on space with the rate of crimes (Irvin, 2003:175)

Other features that may affect on security are proximity to a police sub-station or busy commercial area. Many theorists have justified these factors and their requirements to create a defensible space at urban arenas.

Common Purpose of Defensible Space Plans

All regarded plans for creating or reinforcing defensible spaces have a common purpose that would result in distinct objects according to defined plans.

- Rebuilding of societies' physical arrangement such as permitting residents to

control spaces around their houses. It consists of streets, lands out of their buildings – lobbies- and their interior corridors.

• These plans help people to well-conserve spaces which usually percept their values and habitancy style.

Defensible Space as Socio-Physical Phenomenon

Everybody's social capital is a series of relationship samples with which, a person is involved. On the other hand, social capital is a set of elements in which groups compel their members to do special behavior (Tajbakhsh, 1996: 405, 406). Both society and physical elements are parts of a successful defensible space. The theory argues that an area is safer when people feel a sense of ownership and responsibility for that piece of a community. Newman asserts that "criminal is isolated because his turf is removed" when each space in an area is owned and cared for by a responsible party. If an intruder can sense a watchful community, he feels less secured. Responsibility for the area is more easily assumed in a smaller group of families as opposed to a larger community. Smaller groups more frequently use an area geared toward them. The number of activities in the space is increased; thus, a feeling of ownership and a need to protect the property follows. Both these are factors which reinforce social capital in a

space. World Bank in its definition of social capital (1998) says: social capital contains common values and norms for social behavior which have reflected in people personal relations, in their truth to each other and in common sense of urban responsibility. Subject makes a society, a thing valuable than the collection of persons (Piran & others, 1995: 16).

• Defensible space commonly refers to architectural and environmental design used to reduce criminality by increasing field of observation and ownership.

• Many researchers such as Sally Merry believe that physical factors of defensible space are interrelated with social ties and territoriality in the process of crime and fear reduction (Krupat. & Kubzansky, 1987:58-61).

Oscar Newman believes that size of a building has direct effect on residents' behavior as bellow:

1- Quality of using public spaces in residential complex

2- Social relationship with neighbors

3- Rate of control sense on internal and external public regions of a complex (Newman, 2000).

He also believes that defensible space features induce the territoriality and social ties that are necessary to create a true defensible space.

The objective of safe city initiative is to help crime prevention especially in the crime prone area.

Definition of safe city is "a city free from crime and fear of crime". The safe city initiative focuses on 4 following areas:

1. Smart partnership between government and residents

2. Prevention of crime through environmental design

3. Alleviation and reduction of opportunities for crime to happen. Combining social protection and physical changes

4. Initiating safety as a catalyst for change, awareness and education (WHD, 2007: 13).

Crime Prevention through Environmental Planning (CPTED) is an important tool; and its objective is to create peaceful and harmonious neighborhood. It helps reduce crime, fear of crime as well as maintain social order.

CPTED approach has 5 major areas with regard to crime prevention:

1. Natural surveillance – designing physical features to maximize visibility

2. Controlling access management and movement

3. Caring for own area

4. Physical and regular maintenance

5. Activities support (WHD, 2007: 14)

CPTED approach enhances aestheticism; creates safe environment, affordable, and common sense approach.

Related Elements of Crime Rate and Defensibility of Space

Certainly, there is a direct relationship between crime rate and defensibility of a space which results in accomplished researches justifying this point. So, cognizance factors related to crime and defensibility would be useful in order to promote environmental quality and security. Following this result and in order to know the related elements with aforementioned variants, 2 sets of social and physical factors have been highlighted by a number of theorists like Sally Merry, Jane Jacobs and Allis Coleman.

Jane Jacobs was the first person to suggest a link between human interactions, urban design, and crime prevention. Her basic concept was that a city space is safe if it is well-populated, or has many "eyes". Mixed-use areas where residences are located next to twenty-four hour businesses are one way to create such a safe space. In addition, if people feel a sense of ownership toward a space, they will watch the space and feel compelled to intervene if criminal activities are observed (Jacobs, 1961).

Petrella et al. give 3 major items to crime prevention: 1) rule enforcement; 2) cognizance of target groups and implement of social prevention actions; 3) planning and physical management (Petrella, 2004).

Researchers' outcome like Park and Barges

about social factors which are related to crime rate shows that some parts of commercial and industrial urban zones that have afoul social unformed of social aspect, develop values and criminological customs (Bayanlo, 2007:37)

Crime Prevention through Environmental Design (CPTED)

Criminologist studies show that there are three approaches to crime prevention. First, there is the 'crime prevention through environmental design', which emphasizes that criminal opportunity can be reduced through architectural and planning techniques that make criminal activities more difficult to take place and can reduce the incidence and fear of crime (Schneider & Pearcy,1996). Second, 'place-specific crime prevention', a term coined by the US Department of Justice, which tried to address crime in specific places by combining physical and institutional crime prevention strategies, such as community policing and community crime prevention. It combines the concept of design with changes in management and use of a place (Feins, Epstein & Widom, 1997). Third, 'situational crime prevention' policies, mainly developed in the UK, aimed at reducing crime levels by eliminating or blocking 'opportunities' for crime (Mayhew et al, 1976). It focuses on settings of crime rather than those committing criminal activities, developing opportunity-reducing measures that

targeted specific forms of crime, proposed management, design or manipulation of the immediate environment in a systematic and permanent way, and making crime more risky and less rewarding (Clarke, 1997). Despite some differences, what three approaches share is their focus on places in which crime occurs and arguing for designing and managing these places to prevent crime. According to this view, to prevent crime, buildings and places need to be subject of better surveillance and target hardening.

In *Death and Life*, Jacobs listed three attributes needed to make a city street safe: a clear demarcation of private and public spaces; diversity of use; and a high level of pedestrian use of sidewalks (Fig. 1, 2). Schlomo Angel was an early pioneer of CPTED and studied under noted planner Christopher Alexander. Angel in her Ph.D. thesis states "the physical environment can exert a direct influence on crime settings by delineating territories, reducing or increasing accessibility by the creation or elimination of boundaries and circulation networks, and by facilitating surveillance by the citizenry and the police." He asserted that crime was inversely related to the level of activity on the street, and that the commercial strip environment was particularly vulnerable to crime because it thinned out activity, making it easier for individuals to commit street crimes (Luedtke, 1970).

Figs 1& 2 Increasing activity rate in street and urban public spaces, with supporting social capacity concept, encouraging passengers use and reduce of crime rate sensibility. (Ref: Rezaeifar)

In fact CPTED approach, (NICP, 2005) follows specific guidelines for reducing urban crimes (Gronland, 2000), which have paid them from preventing crime center as bellow (Pourjafar et al., 2008: 78):

1) Controlled spaces concept in urban structure
2) Increasing of natural surveillance in pathways and urban spaces
3) Concept of public, semipublic and private spaces
4) Creating safe behaviors in unsafe regions in a city
5) Prevention of creating of unsafe regions in safe regions in a city.

These guidelines prevent undesirable social activities with public surveillance in urban spaces through promoting of urban design procedure.

Background of creating and reinforcing defensible space approach in traditional Iranian cities

A glance on Iranian history makes it evident that cities with traditional texture have been tended to reinforce safe spaces through proportioned design with city framework and increase of social relations between residents. A more precise study on historical texture of traditional cities shows the formation of city framework in order to creating public surveillance and preventing natural milieu that are basis of defensible space creation as well as principles of Newman and Jacobs. Crow also says about creating desirable access and reducing access of guilty through public surveillances on pathways (Khamushi, 2008: 73). In order to increase space surveillance in traditional Iranian cities, we find that windows faced toward quarter's pathways and squares. Pathways in traditional desert cities' texture, which usually have high walls and low width as continental regards, so these windows which sometimes have very beautiful leaky appearance, beside controlling function also ensure interior spaces intimate for residents who desire to preserve it.

Defensibility in Traditional Iranian Cities

Urban spaces in traditional Iranian towns had important role for safety and security of people. One of the main problems in Iranian urbanization is the spatial milieus and peoples' access hierarchy to different spaces. The spatial milieu usually identifies with two main divided items, public and private spaces. Semipublic and semiprivate spaces have been defined in the form of a separate dead-end or a porch which had access to several houses. It was milieu of several residential units or neighborhood complex and public spaces like pathway and square, had been a quarter boundaries (Farsaei, 2009). In fact, existent elements in built form of traditional cities have been subsystem. These elements have traversed its supplementary trends and are genesis of an eminent system. Some of these elements are as bellow (Farshad, 1983):

- Dead-end: the smallest system which means in historical milieu of cities; network connections in dense built cities with gradual and organic growth, result to emerging dead-end pathways with very different lengths to ensure access to residential units or other architecture spaces. Many of these network connections were direct way or curved and some of them in the form of a maze way (Soltanzadeh, 1991: 26). Dead-ends (cul-de-sac) don't allow strangers, nonresident and passerby to enter a neighborhood. (Pourjafar, 1983: 35). These were a kind of semiprivate for the residents (Soltanzadeh, 1991:41).

- Dead-end network: composed of several simple dead-ends and a pathway which connect these systems to each other;

- Connective pathway: a major unit composed of several dead-end networks around open-end and short pathway without public use.

- Sub-mohalla: a composition of whole previous items (Dead-end, Dead-end network) around a longer pathway makes sub mohalla. On this pathway, there are usually located limited spaces in the form of small plaza and public uses around it like bath, mosque, and retail. These small plazas in Iran's traditional cities are a perfect example of diversity and mix uses, creating a kind of space in order to increase peoples' presence and enhancing social surveillance which can be comprehensive type for modern cities in order to create defensible spaces and promoting environmental security.

- Mohalla: composed of two or three sub-mohallas around an important urban pathway which usually main square, mosque and bazaar located around it;

In Iranian cities, mohallas were like a small city in the heart of main city which contained small bazaar, mosque, school and other required facilities for residents. These facilities connected each other and residential houses with narrow lanes. So, intimacy, comfort and residential

texture security would be ensured while houses have located around of dead-end lane of a quarter (Pourjafar & Taghvaei, 2002: 12).

- City: composed of mohallas with bazaar, governmental square, state buildings and mosque; Connection between composed elements of traditional cities was important in forming urban system. Followings are types of inter-elements connecting traditional cities (Farshad, 1983).

- Skeletal connectives: contain pathways and passages. In ancient cities, main elements like, mosque, water-storage, castle and bazaar were located in the major artery path. So, all mentioned elements were connected to each other with a path or a set of paths. Location of "insecure" activities in "secure places" means that places with high rate of activity and more surveillance opportunity are some of valuable solutions in reducing crimes in urban quarters and regions which as a support activity is one of CPTED theory principles and related with other principles like milieu, entrances control and surveillance. In fact, "safe activities" would act as a residents' community center in quarters, so it would result to increasing surveillance of street, social coherence, enhancing informal social control (Mahmudi Janaki & Ghurchibeigi, 2009: 363).

- Social and control communication: subsystems of an urban system were composed of mohallas with autonomy, aspect of administrative and legal structure and accomplished their routine necessity inside subsystem. In fact, traditional mohallas with these qualities enhance social surveillance especially through creating a feeling of ownership.

- Suburban and city- rural communications: During old days, main centers and villages around them were linked. This communication led to exchanging goods, agriculture products, information and …;

- Hierarchy between urban elements, behavior and structural dimension: this hierarchy is observable in special city structure (mohalla, bazaar, and mosque), hierarchy of existing access (main path, sub-paths, dead-ends), spatial hierarchy of public and private aspects, hierarchy of distributing urban services and hierarchy of present symbolic elements. Subject which "Jacobs" (1961) mentions as a "clear demarcation of private and public spaces" is one of three attributes needed to make a city safe.

Traditional Iranian cities had a regular system. These cities had a growth process accessible to many of the organic systems (ISNA, 2009). In fact, traditional Iranian cities have characteristics like security, intimacy, identity and values like this –what is necessary for reinforcement of defensibility- with itself (Pourjafar, 2009: 55). Regular system in Iranian traditional cities starts with "dead-end"

and finally makes "city" with all elements. In fact all dead-end make "dead-end network", which constitute "city" as a greater system with subsystems like "connective pathway", "sub-mohalla" and "mohalla". Also, correlations like physical, social, control, suburban, … relation between urban elements, set system in dynamic situation, state which have caused improvement of quality of life in Iranian old city built form, nevertheless it reinforces main principles of urban spaces defensibility under social and structural aspects with creating dynamic environments that supervises with social surveillance.

Isfahan's Naghsh-e-Jahan: Mix Land Use, Environmental Security, defensibility promotion

A glance on the traditional Iranian cities shows that the presence of various activities was not just monotones but they always followed a combination of harmony and compatibility.

Indeed, one comes across defensible space' principles, what some theorists like "Jacobs" (1961) explained it later. Isfahan is one of the fine examples of traditional city with some fine memories of Safavid like Naghsh-e-Jahan square.

The Safavid was one of the most significant ruling dynasties of Iran (Helen, 1989: 313). They ruled one of the greatest empires (Emory, 1989:145) since the Muslim conquest of Persia

(Stanford, 1977:77) and established the Twelver (Andrew,2006) school of Shi'a Islam as the official religion, marking it one of the most important turning points in Muslim history. This Shi'i dynasty was of mixed ancestry (Kurdish with intermarriages with Georgian and Pontic Greek dignitaries) and ruled Iran from 1501 to 1722. The legacy that they left behind was the revival of Persia as an economic stronghold between East and West, the establishment of an efficient state and bureaucracy based upon "checks and balances", their architectural innovations and their patronage for fine arts (Savory, 1980: 3). In fact, a new age in Iranian architecture began with the rise of the Safavid dynasty. Economically robust and politically stable, this period saw a flourishing growth of theological sciences. Traditional architecture evolved in its patterns and methods leaving its impact on the architecture of the following periods.

Indeed, one of the greatest legacies of Safavid is their architecture. In 1598, when Shah Abbas decided to move his capital from the north-western city of Qazvin to the central city of Isfahan, it was just four years after he ascended the throne (the year of 1000) (Zarrinkob, 1380: 698). He initiated what would become one of the greatest programs in the Persian history; the complete renovation of the city. Choosing the central city of Isfahan, fertilized by the Zāyande Roud ("The life-

giving river"), lying as an oasis of intense cultivation in the midst of a vast area of arid landscape (Savory, 1980: 155). It is worth noting that, Roznameh Molla Jalal Monajjem or Tarikh Abbasi is one of the major sources of recognition of Safavid era offering valuable information, which has explained about Isfahan during Shah Abbas and its urbanism in some parts of the book (Wikipedia, 2011). Skandar Beig Monshi , the author of Alam Araye Raye Abbasi' book in describing Isfahan urban design writes: (... during spring great buildings in the Naghsh-e-Jahan planned , architects and engineers plan to put it in the end . And among the city gates, one is located in the area of the Naghsh-e-Jahan garden and it is called Dowlat Gate. From there to the Zayandeh Roud constructed a street and Chahar Bagh both sides of the street and higher buildings put on the port of any garden design. And from the river up to the mountain in the south of the city, ends the street (Skandar Beig Monshi, 1377: 872).

The chief architect of this colossal task of urban planning was Shaykh Bahai (Baha' ad-Din al-ʿAmili), who focused on two key features of Shah Abbas's master plan: the Chahar Bagh avenue flanked either side by all the prominent institutions of the city, such as the residences of all foreign dignitaries and the Naqsh-e Jahan Square -"Exemplar of the World"- (Sir Roger,1989: 172).

Fig 3 Naghshe-e-Jahan square, Shah Mosque plan on the right and urban texture of environs square. (Ref:http://civilica.persiangig.com/image/geograghy/ esfahan.jpg)

Shah Abbas wanted to undermine the political structure, and the recreation of Isfahan, as a Grand capital of Persia, was an important step in centralizing his power (Savory, 1980). Eleven years after the transfer of the capital, Shah Abbas constructed the Naghshe-e-Jahan (the year 1011 AH. / 1598 AD) (Zarrinkob, 1380: 698). The ingenuity of the square or Maidān, was that, by building it, Shah Abbas could gather three main components of power; the power of the clergy, represented by the Masjed-e Shah, the power of the merchants, represented by the Imperial Bazaar, and of course, the power of the Shah himself, residing in the Ali Qapu Palace (Fig. 3).

Distinctive monuments like Sheikh Lotfallah (1618), Hasht Behesht (Eight Paradise Palace) (1469) and the Chahar Bagh School (1714) appeared in Isfahan and other cities. This

extensive architecture was rooted in Persian culture and took form in the design of schools, baths, houses, caravanserai and other urban spaces such as bazaars and squares. It continued until the end of the Qajar reign (Jodidio, 2006).

Isfahan's Naghsh-e-Jahan square is among important urban spaces in Iranian architecture and urbanism; this square has been a place for carnival and special governmental ceremonies, also a place for social communication between Isfahan people. In Iran urbanism, there are some spaces which have smaller scales. An architecture space, especially in the way that is planned for person' movement in the space has always been considered by designer. In other space which pause and stop is needed, with open space and other tools, can induce a person to stop (Afshar, 1354: 21). For example, we consider the historical city of Yazd. According to historical documents, fencing of the "city" and its first expansion has been done by branch of the Kakuyeh dynasty. Kakuyeh dynasty developed Yazd around the primary core of the and subsequently Alaoddoleh Kakuei his successors encircled the town by the moat, towers and forts (Jafari, 1337: 37).

Study on design of one of the old alleys of the Yazd city illustrates that, in this ancient mohallas, in front of an elongated rectangular space which has dynamic characteristic in its length, suddenly opens a square space, which gives it a static character (Afshar, 1354: 21). Like small squares called Meidancheh, in different mohallas of Yazd,

there is a many examples of Meidancheh which justifies (Farsaei, 2009) deep regard of Iranian architects toward urban spaces.
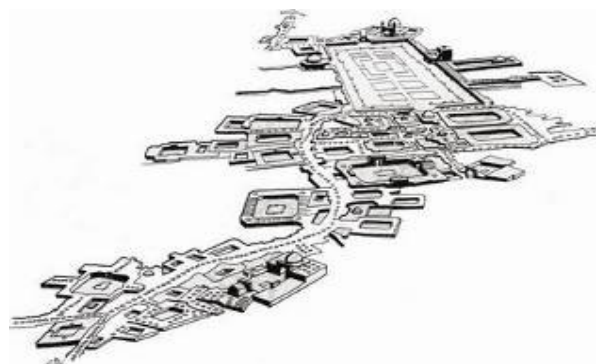
Figs 4& 5 Bazaar path and business activities beside diversity uses; recreational, religious, tourism,... around the square, give square possibility for natural surveillance and continues guarding in the old and valuable of Safavid bazaar through encouraging citizens and tourists presence.
(Ref: right pic; http://tinypic.info/files/qbdokatrb9 ac8xh1ezxd.jpg , left pic; http://tinypic.info/files /701jxf38hqyiadwu1ues.jpg)

Study on Naghshe-e-Jahan with emphasis on defensibility and environmental security of urban spaces confirm exploiting of defensible principles. One of these principles which have regarded in this historical square is diversity and efficient mix of planned uses around the square (Fig. 4, 5).

Nowadays, urban land use has gained special value in urban and regional planning; because of it determines proper use of urban lands (Ziari, 2002:

2). According to the special planning theory, urban land use shall response to beautiful perception, spatial identity and felling of environmental ownership –element that is necessary for creating urban defensible spaces- (Saeednia, 2008). Study of this invaluable square –Naghsh-e-Jahan - shows various cultural, tourism, religious, business and administrative uses (Fig. 4, 5) which have composed in a well continuum and beside of increasing "natural surveillance" – as one of defensibility principles which have been mentioned by "Newman", who puts it as a continuity between physical qualities and residents ability for observing what happens- act its functional task in square (Newman, 1996).

Figs 5& 6 Views of Naghsh-e-Jahan square which shows interesting design with various activities as unique example of a traditional safe and secure city. (Ref: http://www.hamshahrionline..irimagesupload /newspose8607bazar1-zr.jpg.jpg)

Bazaar with business activities is as an important urban heart. These activities, encourage "people use the pathways" which "Jacobs" (1961) expresses as a requirement to the defensible space. Also "Angel" in his researches mentions that crime rate is related with activity scale in streets. So, felling of ownership in Naghsh-e-Jahan among shop owners which have surrounded the spaces around would lessen social responsibility. In other words, dominant social surveillance decreases crime situation and increase environmental security. Pettersson also emphasizes on "diversity of use in quarter" in order to reducing of crimes opportunity through increasing people presence (Pettersson, 1997: 179-202) and kinds of activities.

Conclusion

In order to manage safe and defensible urban spaces, study on "built environment" by architects, designers and urban planners in different periods through Iranian historical cities' works, can be effective in finding some guidelines. It is the necessity of this study. With general definition of elements and traditional Iranian cities, express ideas which one finds in Isfahan's Naghsh-e-Jahan square. Reviewing some of the defensible space theories about security, defensibility and crime prevention in urban spaces, show that there is a kind of criticism to design condition and built environment during that period. One of these is,

"Jacobs" theories about American cities in 20th century, where she believes "diversity" and "vitality" in cities. We can conclude that planning and designing of various urban spaces without continued activity and enough density of people can make city spaces insecure. With reduction of peoples' presence in streets, we decrease "natural surveillance" hence; increase crime rate.

Study on Iranian traditional cities as a systematic organization, where all elements and details in a related structure starts with a smallest system, "dead-end" and finally terminates at a greater system "city" in a related continuum. Indeed, collection of dead-end make "dead-end network", beside other subsystems like "connective pathway", "sub-square" and "square" constitute "city" as a greater system with correlations like physical, social, control, suburban and other relations between urban systems' elements, shows Iran's historical cities have had main principles of urban spaces defensibility under social and structural aspects with creating dynamic environments which supervises with social surveillance.

These cities have been perfect examples of diversity and proper mixed uses, spaces for increasing peoples' presence and enhancing social surveillance. There should be a kind of considerable social capital support as well as comprehensive pattern in order to create defensible spaces and environmental security in various urban spaces of our modern cities.

References

[1] Afshar, Iraj (1975). "Introducing historic buildings and ancient monuments of Yazd", *Yazd Souvenirs* Tehran: National Heritage Association publication.

[2] Altman, Irwin (2003). "The environment and social behavior: privacy, personal space, territory, crowding". Trans. Ali Namazian, Tehran: Beheshti University Press.

[3] Andrew J. Newman (2006). *Safavid Iran: Rebirth of a Persian Empire*, London: IB Tauris.

[4] Anthony Bryer (1975). "Greeks and Türkmens: The Pontic Exception", *Dumbarton Oaks Papers*, Vol. 29 (1975), Appendix II - Genealogy of the Muslim Marriages of the Princesses of Trebizond.

[5] Aptin Khanbaghi (2006). *The Fire, the Star and the Cross: Minority Religions in Medieval and Early Age*. New York: IB Tauris, Pp. 130-1

[6] Bayanlo, Yousef, Mansurian, Muhammadkarim, (2006). "Relation of population density with rate and type of crime", *Journal of Refah-e-Ejtemaei*, Tehran, Vol.6, No.22.

[7] Clarke, R. V. (Ed.), (1997). *Situational Crime Prevention: Successful Case Studies*, New York: Harrow and Heston.

[8] Crowe, Tim (2000). *Crime Prevention through Environmental Design*, 2nd Edition, Boston: Butterworth – Heinman.

[9] Emory C. Bogle (1989). *Islam: Origin and Belief*, University of Texas Press

[10] Farsaei, Alireza (2008). Urban spaces and Iranian urbanism principle, dwelling issue, available at: http://www.maskanmag.com.

[11] Farshad, Mehdi (1986). *Systematic Theory*, Tehran: Amirkabir Press.

[12] Feins, J., Epstein, J., & Widom, R. (1997). Solving crime problems in residential neighborhoods: Comprehensive changes in design, management and use. US Department of Justice, Office of Justice Programs, National Institute of Justice, Washington DC.

[13] Habibi, Mohsen (1999). Urbanism academy booklet, Tehran:Tehran university.

[14] Helen Chapin Metz, (1989), "Iran, a Country study" University of Michigan.

[15] Ibn-e-Khaldun, Abdolrahman, (1973), *Ibn-e-Khaldon Introduction* (translate: Muhammad Parvin Gonabadi), Tehran: Scientific and Cultural Press.

[16] Jacobs, J, (1961). *The Life and Great Death of American Cities*, New York: Random House.

[17] Jafari, Jafar Ibn Mohammad Ibn Hassan, (1964). *History of Yazd*, Tehran.

[18] Jeffery, C. Ray. (1990). *Criminology: An Interdisciplinary Approach*. Englewood Cliffs, NJ: Prentice-Hall.

[19] Jodidio, Philip, (2006). *Iran: Architecture for Changing Soc*ieties, Umberto Allemandi.

[20] Krupat, E. & Kubzansky, P. (1987). "Designing to Deter Crime". *Psychology Today*, 21, 58-61.

[21] Khamoushi, Tahereh, (2008), "The role of urban design in creating safe places with respect to improving the social behavioral pattern", Tehran: Tarbiat Modares University, MSc. Thesis.

[22] Luedtke, Gerald and Associates. (1970). *Crime and Physical City*: *Neighborhood Design Techniques for Crime Reduct*ion. Washington: U.S. Department of Justice.

[23] Mayhew, P. M., et al. (1976). *Crime as Opportunity*. London: Home Office.

[24] Mahmudijanaki, Firuz, Ghorchibeigi, Majid, (2002). "The role of environmental design in prevention of crime", *Journal of Law*, 39, No.2, University of Tehran.

[25] Monteskio, Sharl loei, (1983). *Roholghavanin* (trans by A. Mobtadi), Tehran: Amirkabir Press.

[26] Newman, Oscar. (1996). Creating Defensible Space , U.S. Department of Housing and Urban Development Office of Policy Development and Research.

[27] Newman,Oscar, (2002. "The role of urban

design in creating of defensible spaces", (trans. by Nasim Iranmenesh), *Shahrdariha Journal*, Vol.4, No.44.

[28] Petrella, Laura, (2004). *Urban Space and Security Policies: Between Inclusion and Privatization*, UN-HABITAT, World Urban Forum, Barcelona, Spain, www.unhabitat.org/programmes/safercities /WUF_UrbanSpace.asp.

[29] Pettersson, G. (1997). Crime and Mixed-use Development, in Coupland, A. (Eds), *Reclaiming the City: Mixed Use Development*, London: Spon.

[30] Piran, Parviz, Musavi, Mirtaher, Sheibani, Maliheh (2006). "Creating of social capital (with emphasis on Iran), *Journal of Refah-e-Ejtemaei*, Vol.6, No.23, Tehran.

[31] Pourjajafar, M.R. (1983). "Neighborhood Unit, Perception and Performance of Sector 22, Chandigarh", B. Arc Thesis.

[32] Pourjafar M, Mahmudinejad H, Rafieian M, Ansari M, (2008). Promotion of environmental security and reducing urban crimes with emphasis on C.P.T.E.D approach, Vol.19, No.5, Tehran.

[33] Pourjafar M, Taghvaee A, (2002). "Optimum criteria of planning and design of residential texture of cities with respect to social correlation", *Modares Honar Journal*, issue1, Tehran: Tarbiat Modares University.

[34] Pourjafar M, Taghvaee A, (2009). *Rehabilitation and Improvement of Old Texture of a City*, Tehran: Payam Press.

[35] Rostami Tabrizia, Lamya., Madanipour, Ali (2006). Crime and City: Domestic Burglary and Built Environment in Tehran, Habitat International 30.

[36] Schneider, S., & Pearcy, P. (1996). "The theory and practice of crime prevention through environmental design: A literature review", A report for Canada Mortgage and Housing Corporation, Ottawa.

[37] Soltanzadeh, Hossein (1991). *Urban Spaces in Iranian Historical Textures*, Tehran: Cultural Researches Center Press.

[38] Saeednia, Ahmad (1998). *Urban Land Use*, vol.2, Tehran: Urban Planning and Research Center.

[39] Savory, R, (1980). *Iran under Safavids*," Why is there such confusion about the origins of this important dynasty, which reasserted Iranian identity and established an independent Iranian state after eight and a half centuries of rule by foreign dynasties?",Cambridge University Press, p.3.

[40] Savory, Roger, (1980). *Iran under Safavids*, Cambridge: Cambridge University Press.

[41] Savory, R. (1980). *Safavid Empire under Shāh Abbas the Great* (1588-1629), Cambridge: Cambridge University Press.

[42] Sir Roger, Stevens, (1989). *The Land of Great Sophist*.

[43] Stanford Jay Shaw, (1977). *History of Ottoman Empire*, Cambridge University Press.

[44] Tajbakhsh, Kian, (2005). *Social Capital: Trust, Democracy and Development*, trans. by Afshin Khakbaz and Hasan Puyan, Tehran: Shirazeh Press.

[45] Tavassoli, Mahmoud, (1981). *City Building and Architecture in Hot and Dry Climate of Iran*, Tehran: Payam Publication.

[46] Torkaman, Skandar Beig, (1998). *The History of Abbasid*, Tehran:Amir Kabir Publications.

[47] Urban planning and dwelling journal, (2009), Iranian Students' News Agency, available at: http://isna.ir/isna/NewsView.aspx?ID=News-1360945&Lang=P

[48] World Habitat Day (WHD) (2007). Roundtable, "a safe city is a just city" Earoph Malaysia, Pp.13-14.

[49] Ziari, Karamatollah (2002). *Urban Land Use in Planning*, Yazd: Yazd University.

[50] National Institute of Crime Prevention,(2009), Available at: http://www.NICP.net (2009).

[51] http://www.wikipedia.org (2011)

[52] http:// www.voruidoso. com/Photo%20 Gallery.html (2009)

[53] http://www.hamshahrionline.ir (2009)

[53] Naghsh-e-Jahan Bazaar, Available at: http://vista.ir/include/photos/FAA17011.jpg&imgrefurl (August, 2010)

[54] Naghsh-e-Jahan Square, Available at: http://civilica.persiangig.com/image/jeografhy/esfahan.jpg (August, 2009).

[55] Naghsh-e-Jahan Bazar, Available at: http://i39.tinypic.com/2mwbkp.jpg, (August 2009)

نقش فضاهای دارای امنیت اجتماعی شهرهای سنتی معماری ایران در کاهش جرایم شهری با تأکید بر رویکرد CPTED*

فاطمه رضایی فر[1]، محمد رضا پورجعفر[2]، علی اکبر تقوایی[3]

لزوم توجه به یکی از اصول مهم زیستی و حیاتی بشر، یعنی نیاز به امنیت و احساس آرامش در محیط زندگی و اهمیت توجه به این نیاز – امنیت – در فضای شهری موجب شکل گیری مجموعه نظریـات مستندی چون نظریه فضاهای قابل دفاع، پیشگیری از جرم از طریق طراحـی محیطـی (CPTED) و . . گردید. این مقاله ابتدا با بیان مختصری از تئوری‌های مطرح شده از سوی صاحب نظران این مبحث – فضای قابل دفاع – تعاریف مربوط را از جنبه‌های مختلف فیزیکی– اجتماعی بررسی می کند. سپس با مرور روند شکل گیری شهرهای سنتی ایران، به بررسی رویکرد فضای قابل دفاع در شهرهای تاریخی سرزمین کهن ایران می‌پردازد و ضمن آن، اشاره‌ای مختصر به نمونه کـاربردی و مؤفـق اثر ارزشــمند شهرسازی ایران در دوره صفوی، میدان نقش جهان اصفهان خواهد داشت.

روش تحقیق در این مقاله، تحلیلی اسنادی از نوع توصیفی اسـت کـه ضــمن بهــره‌گیری از منـابع، اسناد و مدارک مرتبط با تحقیق، از روش پرسشنامه به منظور سنجش شـاخص‌هـای امنیتـی در بسـتر شهرهای تاریخی ایران استفاده شده است. نتایج و یافته‌های تحقیق، سابقه وجود فضای قابل دفاع – در طراحی و برنامه ریزی – را در شکل‌گیری شهرهای تاریخی ایران تأیید می‌کند. فضاهایی امـن کـه بـا مسئولیت جمعی مراقبت می شده، و نقش بارزی در کاهش جرایم و ثبـات امنیتـی در شـهرها داشـته است.

واژگان کلیدی: شهر، جرم، امنیت، شهرهای سنتی ایران، CPTED

---

۱. کارشناس ارشد شهرسازی دانشکده هنر دانشگاه تربیت مدرس

۲. دانشیار دانشکده هنر دانشگاه تربیت مدرس

۳. دانشیار دانشکده هنر دانشگاه تربیت مدرس