# The Study of the Relationship between House Architecture and Crime: A Case Study in Shahre-Kord, Iran

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#### Abstract

The issue of crime prevention is one of the main human concerns throughout history. Different methods have been applied to reach this goal including social, penal and legal conditional prevention. Dwelling (at the micro-scale) which is considered as the physical dimension of living in the social environment is so important as the principal location for survival of human and society and in this study, we tried to identify and study the relationship between the architecture of house and crime by collecting library information such as study of books, and articles and available resources relevant to the topic. The statistical population of this research included all the criminals in the Shahre-kord province and the sample population were 135 criminals from 2012/06/04 to 2012/06/19 in police stations and all the military authorities in Shahre-kord province. The criminals filled the questionnaire and they were analyzed. The research method was survey and by using descriptive statistics, the correlation between two variables was investigated. The result of Gama Test about the architecture of dwelling and crime shows that the kind of dwelling architecture is different with regard to crime. From the statistical point of view, the relationship is significant (s=0/05). Thus, the hypothesis that there is a significant difference between architecture of people's dwelling with regard to crime was confirmed.

Keywords: Crime Prevention, house, Architecture Design, Environment Design, Disorder

#### Introduction

One of the most complicated issues in many countries is the high rate of crime and disorder increase and the incidence of crime and disorder leads to a sense of insecurity and financial difficulties imposed upon society, government, and the country's judiciary (Rahmat, 2009). Iran's Supreme Leader states that if there is no security and prosperity, none of the scientific achievements of the society including scientific, tactical and political progress cannot be properly put in place and would not provide its real benefits to people. This issue shows the necessity of practicing crime prevention policies more than ever before establishing security in society and it depends on recognizing factors causing crime and the impact of various issues in this category which, by removing crime-prone factors or reducing their effects, can prevent the occurrence of crime or at least reduce its rate in the society.

Because the high financial and non-financial costs and practicing coercive policies and lack of their considerable effect in reducing the number of crimes, especially organized crime with the high risk of getting caught only increases the rate of criminal activity without causing it to be removed or reduced. Since urbanization and buildings architecture is one of the cases that is directly related to crime and is an effective factor on it, some countries in the area of criminal architecture act practically and pay specific attention to this issue in designing buildings and cities which cause preventing occurrence of crime (Rahmat, 2009). Architecture design of social environment and house, which are the physical and residential aspect of human significantly impact crime prevention, accordingly it can be said that the quality of architecture and urbanization greatly influences behavior and treatment of people, as people living in a corrupted city lose the opportunity of progress. Thus, in designing cities and architecture of houses, we should pay attention to the Islamic and Iranian architecture patterns appropriate for social and cultural characteristics of our country and even in modeling designs of other countries, we should be careful not to ignore appropriate Islamic identity and architecture standards (Noghre Kar, 1996).

Also, it is the responsibility of authorities that, by using viewpoints of experts' from different organizations, prominent engineers and lawyers adopt relevant laws and pay more attention to the critical and key role of architecture and urbanization in reducing crime and increasing social security.

#### The concept of residence

Residence indicates locating and identity. Residence shows a meaningful link between human and the assumed environment that is derived from quest for identity i.e. a sense of belonging. Therefore, humans know themselves when they are resided and consequently established their existence in the world (Nourbari, 2002).

In Heidegger's point of view, humans' way of being on earth is their residence. In his article titled "building, residing, thinking" with German root of the word "to build" old implications and a variety of concepts are opened to state the food for existence and interpret residence as being with other things such as in existence and time. Also, he discussed the residence of human soul in the truth of self-existence. In his speech, he insists that thinking and poetry necessitate residence. He assumes residence as the most fundamental feature of self as mortalities. At the end of this article, it is stated that, now, everyone speaks about lack of residence but nobody thinks about the real disaster. Homelessness occurs as a result of ignoring the real house disaster. Heidegger's answer to this problem is that mortalities push residence to the totality of their essence and it is dependent on how they build to reside and think of residence (Tahouri, 2002).

At the second international conference on "Human Settlement", a convenient settlement is defined as "adequate shelter is not merely a roof over everyone's head; Adequate shelter means convenience, environment, physical accessibility and adequate security, property, security, stability and durability of structures, lighting, ventilation and heating system are suitable, adequate basic infrastructures such as water, health, education, waste disposal, environmental quality, factors for good health, good available location for work and basic facilities, all of which should be provided with regard to people's affordability". In general, there are factors in housing that define the quality. Such factors are described in the neighborhood scale as desirable form of house, house safety, security, convenience and accessibility and residents' appropriate distance to facilities and physical services of neighborhood, accessibility to the nature and open environment, providing facilities and equipment (infrastructure) required for the house, and house' adjacency to compatible uses (Shi'a, 1994).

### **Social housing**

Housing is assumed to be a place with the least facilities which provides appropriate residential conditions for material and spiritual growth of its residents. On the one hand, rapid growth of population and on the other hand, people's tendency to cities which is facing the ever increasing demand for accommodation created numerous problems in the area of urban development. In accordance with Article 31 of Iran constitution, owning a suitable house is the right of each Iranian family which should be taken into account with regard to the changes in family's dimensions and tendency to its shrinkage, obsolescence of traditional life, rupture of married people from their parents in terms of housing that are enumerated as factors of housing crisis. These changes, in addition to increasing demands of life, make the house a space that provides appropriate residential condition for material and spiritual growth of its residents with the least facilities. In Iran,

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according to article 31 of the constitution, having suitable house for each Iranian families, this issue of changes in families dimensions and tendency to their shrinkage has intensified the need for dwelling (Dadvar, 1994).

#### Sociocultural issues of desirable house

Experiences of various countries with different economic and social systems indicate that each country, according to its social and financial structure, encounters the social aspect of house. Government's interference in solving accommodation problems becomes important when we understand that problems of achieving house has so many effects and implications that is reflected in the process of family establishment and its uses. Maybe, the most important behavioral problem of a residential environment is to create appropriate field for children's compliance with their environment; thus, "the residential environment should be able to meet the needs of different ages and is equipped with it. In other words, a house should answer a broad range of needs and covers family requirements, children's need, individual life, social care and needs of housing environment. According to the new definition, a house in addition to providing social growth should include the environment besides the residential unit".

In search of providing needs in houses, at least families or a large part of it (mother and children) seek refuge to outside the house. In other words, it is one of the consequences of house downsizing and taking out a large part of leisure time activities or employment outside the home. Apart from its significant impact on designing city's public space, if ignored, can lead to a decrease of families' interdependence and instability of the foundation of family". Thus, equipping and providing supplementary parts and houses' surrounding such as school, park, sport field etc. is out of people tolerance (Dadvar, 1994).

#### **Different residential places (types of house)**

Architecture displays its real symbol in residential places with which people interact more frequently. At first, we should study the interaction of house and public culture of society with emphasis on different types of house and different forms of residency in a survey study. Then, the policies adopted to prevent crime in any type of residential place are determined accordingly (Rahmat, 2009).

Basically, a city is the location for development of some types of housing, such as huts, apartments and towers. This type of house is the outcome of urbanization development and its uncontrolled growth in developing countries that suddenly accepted the results and impacts of industrial development. Urbanization and city development caused irreparable damages to the behavior of people in the community. The heterogeneous growth of city population provides ground for housing and establishment of abnormal housing. These residential environments should be exactly identified and afterwards causes weakening the dominant relations on the social system and emergence of behavioral disorders. For a better understanding of the impact of environment on crime, it is necessary to identify residential environments. Among this type of settlements, apartments, huts and social housing, etc can be referred to. Because each type of these houses has its particular behavioral-cultural issues, the governments' duty is to provide more facilities (Dadvar, 1994).

#### **Literature Review**

It should be noted that preventing crimes through architecture, especially house architecture, creates a new topic. However, the studies in this field are young and in some countries including Iran some research have been done as follows:

Ameri Siahuie (2008) examined the role of architecture in preventing crime. He concluded that prevention in criminology includes social- situational measures that are meant to prevent future or reduce crime, and crime prevention through architecture will help to address this issue. Environmental design is based on the assumption that the physical structure of the environment can be formed in such a way that it can reduce crime or fear from crime and consequently it leads to the high quality of life.

In fact, by appropriate designing and effective spatial and environmental functions, architecture leads to reduction of crime opportunities, fear of crime and improvement of life quality. Since human behavior in life environment is influenced by the environment design, attention to human needs in house architecture, buildings and public places as well as attending to criteria and principles of urbanization leads to crime prevention.

Ghadimi (2011) investigated the impact of house on crimes and concluded that house need is one of the most fundamental necessities of human and this causes an emergence of problems and various crimes in this area in the society. House is where human lives and should feel comfort within. Of course, in a general definition of house, it should be stated that house is something beyond a physical place and consists all services and facilities necessary for human life.

In housing crimes, criminology and sociology come together and trainees of these two fields, taking into account the legal elements of these two fields, analyze the reasons for crime in residential areas. Offence plays a significant role in creating spiritual conditions of a child and prepares him for committing crime. Statistics show that 63 percent of children who lived in undesirable social environments have unfortunate social future, therefore 11 percent of them have lost their lives in different ways such as street fight, motorcycle accidents, execution, etc.; 43 percent had experienced imprisonment at least once and the rest have drowned in life without a certain goal and future.

With regard to what mentioned above, we conclude that encountering crime directly affects crime increase and choosing residential area greatly influences whether or not children become a criminal. If house lacks standard criteria with regard to instruction and area relative to its residents, it may cause deviations.

Among researches conducted outside Iran, O.Newman (1973), in "Architecture design for crime prevention" analyzed the architecture design to prevent crime. The method of designing buildings as a theory was proposed by Oscar Newman who was an architecture engineer, i.e. beginning of integrated crime-oriented studies can be attributed to him. He criticized buildings' design which were built as complex and claimed that such complexes, due to having several exits and entrances and public and uncontrolled surroundings are more vulnerable against crimes than other buildings.

Greenberg and Rohe (1984), in "Neighborhood Design and Crime" studied the physical construction of house; Undoubtedly, the relationship between human with surrounding location and environment appears to happen through their interaction. In other words, the series of human behavior with all facilities and conditions which environment provides him establishes the foundation of this relationship. Every human, with regard to their level of knowledge, awareness and technical ability interfered the environment and on the other hand these conditions are spatial-environmental which characterizes his restrictions and action and behavioral method and finally these two researchers believe that, in some city's constructions, due to physical instruction, dominating it along with social, and financial features of its residents, disorder statistics are high. Conversely, some urban places prevent crime opportunities, i.e. they consider city construction method as an effective factor in disorders and crimes.

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## **Objectives of the study**

The main purpose of this study is to analyze the relationship between people's house architecture and crime in Shahre-Kord. Regarding the partial objectives, the following can be mentioned:

- Analysis of the relationship between characteristics of people's house architecture and crime in Shahre-Kord
- Analysis of the relationship between surrounding features of people's house architecture and crime in Shahre-Kord
- Analysis of the relationship between architecture features of people's house and crime in Shahre-Kord
- Analysis of the relationship between social components of people's house architecture and crime in Shahre-Kord
- Analysis of the relationship between environmental elements of people's house architecture and crime in Shahre-Kord
- Analysis of the relationship between legal elements of people's house architecture and crime in Shahre-Kord
- Study of the relationship between socio-economic basis of people and crime in Shahre-Kord

## **Research Questions**

Regarding the above hypotheses, the followings can be raised:

- Is there any significant relationship between people's house architecture and crime in Shahre-Kord?
- Is there any significant relationship between architectural features of the people's house and crime in Shahre-Kord?
- Is there any significant relationship between surrounding features of the people's house architecture and crime in Shahre-Kord?
- Is there any significant relationship between social component of people's house architecture and crime in Shahre-Kord?
- Is there any significant relationship between legal component of people's house and crime in Shahre-Kord?
- Is there any significant relationship between environmental component of people's house and crime in Shahre-Kord?
- Is there any significant relationship between financial-social component of people's house and crime in Shahre-Kord?

## Statistical population and sample data

The method used in this research is survey. The objective data in this research were collected through written questionnaire, which include different individual sections and scales to assess architectural indices and the crime and delinquency issue. In different parts of the questionnaire, according to the features of items from open-ended or close-ended questionnaires or in form of Likert-Scale were used and were answered through visiting the subjects by person. The population in this research is all the perpetrators of the crime in this city.

Sampling refers to the regular method of choosing and in social researches is applied to choose participants of research items. In survey, sampling is a method for choosing respondents (Baker, 2007:192). The sample population in this research is 135 criminals who attended in police stations of Shahre-Kord from 2012/06/04 to 2012/06/19.

## Results

After analyzing statistical data obtained from questionnaires, the following results were achieved which will hopefully help researchers and further studies.

- In the move of architecture quality from low to high, we expect people's crime to move from serious to insignificant
- The social component of architecture in its move from the weak to strong we should expect people's crime to lighten.
- Those who have leased the property have more and heavier penalties than those who own personal property.
- Lower classes of society committed heavier crimes than the higher classes.

## Recommendations

Legislation on the correct architecture for architects that can be effective in correct design and municipalities can delegate inscribing the end product to compliance with the technical notes on building or residential or administrative complex. Regarding these rules, for example, we can refer to optimal use of design factors including color, environmental beauty and urban furniture at the residential and urbanization architecture level.

Using the principles of Islamic housing that can be derived from the teachings of Islam, in holy book, the Lord describes home as the place of peace so they call it dwelling so it should be taken into account at three levels of architectural, legal and residential application and planning.

- Fundamental construction of passages and crossings in urban debates which provides easy and immediate access to police and police stations and security guards and relief teams like firefighting machines and ambulances etc.
- Providing enough light in passages and homes
- Beautification of buildings' appearance because it proved that dirty homes negatively affects crime and using light and lovely and pleasing colors at home.
- Providing amusement places to fill residents' leisure time and enough green spaces in neighborhoods
- Predicting and embedding the necessary infrastructure, considering adequate dimensions with regard to the number of family members and predicting enough necessary space for family members.
- Holding sessions between all authorities involved in construction at the presence of experts from law enforcement and experts in crime prevention architecture, for example, presence of commission article 100 of municipality for a better realization of preventive architecture.
- Predicting stations for establishment of police stations in urbanization and architecture programs
- Educating and explaining principles and methods of preventing crimes through architecture to architects and all people in this issue are involved and somehow participate in construction.
- Insurance companies in establishing rules and tariffs should consider these principles. Since not preserving rules of non-criminal design increases crime, insurance tariffs should suit the level of preserving these principles.
- With regard to judicial measures, we can refer to the discussion of civic responsibility. Courts can consider damage based on preserving correct architecture principles. Therefore, in giving responsibilities at the time of crime commitment in places that security points are not preserved, a part of responsibility is on the designer or builder or the owner.

- At police stations and crime detection we should pay more attention to the place of crime commitment. For example, providing crime plans, vulnerable places, throughout the city. Crime detection software with information significantly helps recognizing vulnerable places and their improvement.
- Finally, implementing these principles can be useful when, in addition to architects and urbanites, they are taken into account by all legal authorities, therefore using planning principles without crime should have guarantee of implementation.

### References

Ameri Syahoiee, H. R. (2008). Architectural role in crime prevention. tr., Majd Publication.

- Ebrahimi, S. (2009). A collection of international crime prevention practices, (tr.), Mizan publication.
- Ian, C. (2008). Crime-free Designing. translated by M. R. Ameri, Syahoiee and M. Rayjyan Mizan Publications.
- Kaveh, Sh. (2002). Color therapy. Green in Green Magazine.
- Kay Nia, M. (2000). Principles of Criminology, Vol. 3, Tehran: Tehran University Press, IV.
- Kolahchian, M. (2005). Strategies to practice social security, (Proceedings of the Conference on Social Security). Deputy Police community. Tehran: Golpuneh.
- Mir Mohammad Sadeghi, H. (2000). Crimes against property and ownership, Mizan publication, 7th Ed.
- Newman, O. (1973). Architectural Design for Crime Prevention.
- Newman, O. (2002). The role of urban design in the creation of defensible space, (tr.) N. Iran Manesh, municipalities, IV, 41.
- Newman, O., & Frank, K. (1982). Population and Environment.
- Normoyle, Janice B., & Jeanne M. Foely.(1988). The defensible space model of fear and elderly public housing residents, environment and behavior, 20(1).
- Rahmat, M.R. (2006). The role of design in crime prevention. Journal of research evidence, 8 & 9.
- Rahmat, M.R. (2011). Crime Prevention through architecture and urbanism, Mizan publication.
- Shahzadeh, N. (2001). Depression in Concrete towers' residents, Municipalities Magazine.
- Teimuri, A. (2005). The role of architecture and urbanism in Crime Prevention. Criminal Law and Criminology, MA Thesis, University martyr Beheshti.