The Influence of Urban Design in Preventing and Reducing the Amount of Crime and Raucousness and the Delivery of Sense of Security (Lahijan as a Case)

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ABSTRACT

Considering humans have always been seeking ways to obtain comfort all through the history. Undoubtedly one of the elements to reach this goal would be feeling safe in the neighborhood. But the impression of the environment in out breaking different ways of behavior is undeniable. The environment can affect the outbreak of misbehaving. It can also have an opposite effect. Therefore it will be hopeful to reach this goal (citizens’ satisfaction and feeling secure) by identifying and defining some samples. The present article has introduced the causes of feeling insecure in urban atmosphere using librerial and documentral studies and the has delivered some solutions about this in Lahijan using field observations.

Key words: Civil design, Crime, Social racousness, Feeling secure, Lahijan.

INTRODUCTION

Human beings and other living creatures have been effected by their environment and had different suitable reactions in different environment. The existence of a relation between humane behavior and their environment would be undeniable. Regarding the population, social and cultural fluctuations and people blending together, changes in attitude toward environment, visual and structural characteristics would be essential. Naturally along with paying attention to the interior atmosphere, the exterior (city) needs to have essential visual and environmental qualities to deliver satisfaction and felling secure among the citizens. Apparently social standards are not the only causes of crimes, but the physical structure would have a rightful effect on preventing or spreading crimes and other social raucousness. The impression of delivering solutions to urban designing and producing visual comfort in designing manmade space in preventing crimes and social raucousness and cultural problems in not offering environmental opportunities and reducing environmental and structural potential in reducing the possibility of the occurrence of these raucousness is undeniable. Hence as the environment is very effective in showing raucousness, not only it would make it possible to deliver some ideas for urban designing to decrease the causes which bring raucousness and maybe committing crimes, but also it might be possible to control the behaviors and even guide them. Ray Jeffry in “Preventing civil crimes by environmental designing” says that considering behavior in environment is essential to make that. (aram. et al., 2013)

In this article, first some of the most important studies about the conception of security and environmental security and also the causes of increasing or decreasing that have been reviewed. That conclusion have been grouped in four main categories in form of studies conception methods, and at the end with a general point of view and according to the observations of the authors, first the town of Lahijan has been divided in four groups according to the structural and social context and
then this four categories have been evaluated comparing to the effective elements in decreasing social security.
The objective and the questions of the research:
1. What effects would urban designing, environment and structure have on delivering social raucousness among people?
2. How could urban environments deliver the sense of security and satisfaction among the citizens?
3. What are the ways of effecting behaviors using urban design? Would it be possible to deliver a sample for leading behavior?

The hypothesis of the research:
1. It is assumed that dissatisfaction of the inhabitants and the happening of some social raucousness in cities is the result of designers not paying attention to the habitants' individual and cultural characteristics.
2. it is assumed that the discontent of the inhabitants and some social raucousness in cities is the result of designers not paying attention to the habitants individual and cultural characteristics.
3. It is assumed that some sample to reach the citizens' dissatisfaction can be gained.

The theoretical frame of the research
Environmental psychology
Jayferd (1997) has defined environmental psychology as bilateral study between an individual and his/her physical inhabitant. In his opinion in such bilateral affection, an individual would change the environment. By physical habitat we mean physical space with applied and organized aims such as school which is a place to teach and train. Briefly in environmental psychology, behavior would be examined according to physical, architectural or symbolic views of environment. (momenzadeh. et al., 2012)Environment is a complicated and combined concept with different aspects. Spatial, social, data, cultural, physical, cultural, architectural, symbolic, geographical, historical and biological aspects are some of the important aspects of environment. Behavior is affected by different environmental causes such as architectural data. Humans change and organize environmental space in different ways. In this spatial aspect of organizing humans would use behavioral samples to reach their goals.

The cognition of human behavior would be studied in four categories. privacy, solitude, the territory behavior and population which have main roles. (altman., 2003)

Territory behavior has organizing and stabilizing social systems. The important applications of territory behavior are:
1. The role of a motive which increases defending borders and observing individual skills for interaction and existence.
2. Territory makes security, a place to do special things in a limitation where people know how much and how far they own.
3. Territory makes a definition for identity. In fact possession and observation of a geographical area would give a clear definition for individual or group. If someone owns a place to do his/her activities and others respect this, the biggest part of potential opposition and conflicts of life would be solved. (altman., 2003)

Civil identity
An individual presenting and growing up in a population, beside gaining individual identity, earning common elements which are called culture, would gain a team identity and would gain a common history with these. Therefore individual identity is a social event. When we talk about civil identity, civil and citizen identity are both considered. Interactions between people, people and environment, people and city. In Anthony gidden's point of view identity in city, because of making and reminding public memories for citizens would bring out connectivity and affection between them and leads them to be citizens which is wider than being a pure habitant. (ramezani., 2010) According to Kevin Linch, in theory, a good shape of a city and delivering the seven values including freshness, concept, symmetry, availability, observation and control, usage and justice, what we call civil identity is in fact finding the symmetry between urbanization and architecture and cultural, social and economical conditions of the citizens. In fact the formation of civil identity is effected by culture, natural form and manmade structure. Civil identity would be meaningful if it is observed in the physic of the city. (Shamshirband., 2012)
Civil spaces as important elements of civil identity

Civil spaces because of their physical and structural aspects are a sort of symbolic, conceptual, economical and actual space which have a strong bond with city and urban structure. Therefore civil space is a space which is considered as an identifying element, as most of the big cities can be recognized according to their appearance and present a charming appearance to the area and can be the key elements and the civil developmental means. Urban spaces as a base for forming social interactions would emerge and continue by the presence and movements of citizens. A presence which is accompanied by their activities and would display a dynamic life. (ramezani., 2010) Urban designing based on human aspect, is forming the built space according to the human needs which would be seen in designing programmes or defining services.. Today two main aspects in developing programming and designing perspective have delivered the essential base for reaching a humane aspect: 1-the elite and pragmastic aspect 2-renewal aspect. (white., 2002)

The identity and quality of the activities which would be done in urban spaces can be generally related to two main reasons: 1-cultural reason 2-environmental reason(spatial-structural characteristics)

But the quality and quantity of the influence of these two on how the activities which are behaviors or better to say behavioral samples happen are not the same. So using the space mainly has a cultural source and the environment only has a helpful or prohibitory role and is not a determiner in any ways. This is very important for urban designing because although there is no possibility in directly changing the culture or cultural samples in short time, but it would be possible to use designing to protect suitable activities and renew the unsuitable ones. This way it would be possible to deliver spaces to simplify doing demanded activities and preventing the unwanted ones, applying spatial elements in designing streets. Hence urban designing shouldn’t aim to directly conflict with the behavioral samples of the society or modifying them in any aspects, but it should try to apply the tools and facilities for urban designing and useful helpful techniques to design the related spaces and elements in a way that encourages them making suitable behaviors easier and by preventing the unsuitable ones completely stop them. (yazdani et al., 2012)

Table1: The conceptual model of the study, categorizing the effective factors on reducing feeling secure in urban places

<table>
<thead>
<tr>
<th>Order</th>
<th>Main group</th>
<th>Subgroup</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Environmental Factors</td>
<td>Insufficient sight(because of insufficient light, natural problems, fog...)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Nearness to controlled natural or manmade areas(forest, gardens, building sites,...)</td>
</tr>
<tr>
<td>2</td>
<td>Structural factors</td>
<td>Natural factors reducing spatial activities( security increasing or decreasing factors)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sight reducing factors(walls, curved, alleys,...)</td>
</tr>
<tr>
<td>3</td>
<td>Social factors</td>
<td>Lack of safe areas for activities(lack of pedestrian crossing,...)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Incoherence spatial factors(house complexes without humane factors)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ethnic crosses and cultural contacts</td>
</tr>
<tr>
<td>4</td>
<td>Behavioral factors</td>
<td>Social raucousness (addiction, poverty, immoral behaviors in urban places,...)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Limitations and problems typical of specific groups (women, children,...)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Speading unsuitable social behaviors(insult and annoyance, mugging, ignoring other people's rights)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dangerous driving (ignoring the legislations, ignoring other's rights)</td>
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As an example WHITE in his studies on human behaviors in public spaces has concluded that:

- A place should let in the fast and active current of the population.
- People choose an open space in order to escape from a load of population and so the places with the most amount of space, light and air would attract the biggest population.
- People mostly seek for places with a suitable seat. Passengers seek for places which doesn’t cut their traffic.

Undoubtedly people’s behavior is one of the most important events in urban spaces and what is important to consider in urban designing is paying attention to the behavior of the citizens and the applicants of the spaces. (salamati., 2011)

Types of urban spaces

Urban spaces are divided into five main groups which can be considered as citizens’ interaction area. Studying these spaces by knowing citizens’ reactions in them can lead to a more convenient and more suitable designing. So urban spaces can appear in their main role which is forming social and citizenship interactions. (gutman, 2009)

Basic factors of qualifying urban spaces: availability and connection, convenience and view, usage and activities, sociability.

Social goals in designing urban spaces:
1. Reinforcing the ways of individual, visual, lingual interactions based on social interactions.
2. A feeling of affection toward urban spaces, and the formation of inner calmness and outer comfort
3. A simplifier but not inhibitory role in citizenship social activities and leading to normal
4. Reinforcing the feeling of belonging to the society and helping the formation of social sources
5. Replying all social groups and specially vulnerable groups and spatial social equality
6. Making memorable and valuable experiences, and delivering the feeling of research and belonging in urban spaces. (gutman., 1996)

Behavioral samples in urban designing

Urban designing in general concept is be lateral interaction between relations and behaviors. It means that beside being a place for individual identity neighborhood, it’s the most important factor to obtain identity in an urban life and would effect humane behaviors and relationships. Beside that an urban space as a public place is a place to the emerge of individual and social thoughts. It means that it’s the most important centre for humane common understanding, and perhaps because of that it has a very important role in developing

<table>
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<th>Table 2: Evaluating Lahijan’s main spaces regarding security reducing factors</th>
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<tr>
<td>factors</td>
</tr>
<tr>
<td>Environmental</td>
</tr>
<tr>
<td>Controlled zones</td>
</tr>
<tr>
<td>Natural conditions of reducing activities</td>
</tr>
<tr>
<td>Structural</td>
</tr>
<tr>
<td>Lack of safe zones</td>
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<tr>
<td>Incoherence of spatial scales</td>
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<tr>
<td>Social</td>
</tr>
<tr>
<td>Social raucousness</td>
</tr>
<tr>
<td>Group limitation (women)</td>
</tr>
<tr>
<td>behavioral</td>
</tr>
<tr>
<td>Dangerous driving</td>
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</table>

**Strong effect; *medium effect; -no effect
humane society. In this space there is an opportunity to break down some of the boundaries and helping some unplanned contacts happen, and so people would interact in a new social atmosphere. (pakzad., 2006) Delivering social and individual freedom and maintaining equality in urban spaces would happen in urban spaces. Space which is system of relations would guarantee freedom and equality for citizens, and urban space as a place for public meeting. Expending spaces, guaranteeing developing freedom regarding multiple internal activities, expanding agreement based on the possibility of delivering variety, are all considered as techniques for developing the freedom for humane interactions. (sadri., 2006)

**Programming effective designing on citizens’ behavior**

Accurate urban designing and programming requires recognizing cultural-behavioral samples in societies. Urban designing today requires paying attention to basic urban design in order to settling designing methods and techniques according to it’s goals. Reviewing urban designing literature, different points of view can be found as “human point of view”. The amplitude and diversity of this literature had hardened it’s usage for urban designers and in many cases has given opposing concepts due to a lack of coherence. Studying the process of forming and formation of urban spaces has shown that humane needs is the centre of attention in both programming and designing biological spaces. In civil designing the humane and applicant view, based on programming and developing urban places has considered humane requires and values as it’s base routes. This point of view is a suitable bed to make changes in designers’ views and would provide an urban designing based on a humane essence. Since in this point of view urban designers would be able to deliver the main factors for developing and designing urban space based on the specific thinking system about designing. In this point of view each manmade environment is a symbol of it’s presence to reply some of the humane requirements in urban spaces, hence paying attention to cultural factors in urban designing which insists on variety, diversity and hence identifying urban context, seem essential. Therefore urban designers in order to creating an environment which courage’s normal behavior and discourages the unwanted ones. apply different methods and strategies (to prevent unwanted social behaviors) such as inhibitory programmers using environmental design, creating safe places using designs to make the environment suitable for elder lies and disables and also increasing citizens’ understanding about urban design.

**Feeling safe and its role in humane needs**

In fact according to Abraham Mazlo’s classification of human needs which is one of the best accepted classifications in this area, feeling safe and secure, after psychological needs, is the second most essential need. (lang., 2002) In Mazlo’s view after providing physiological needs people immediately pay attention to the needs in higher levels, such as security. These needs are strongly and closely related to structural and social abilities of the environment. (salehi., 2002) Security means being safe and secure. It also means safety, calmness, ease and being protected against being offended and involved without consent. (poor ahmad. et al., 2012) Security in urban spaces

Insecurity in urban spaces is very complicated and contains apparent and hidden characteristics which can’t easel be generally explained. The statistics of natural disasters such as earthquake, flood, tsunami and social or individual insecurities such as terrorism, wrath, murder, prostitution and drug abuse is a sign of vast insecurity in towns. Probable or absolute insecurities in an urban environment is very widespread. (saremi., 2010) One of the most important threatening cases in public places is fear or feeling unsafe. Ellin believes that if people don’t use a place because of in comfort or fear, the public area has been destroyed. (shoa barabaadi. et al, 2010) Insecurity in public places will effect alacrity and health in daily life or prohibiting cultural growth and public association would inflict big amount of cost
to the society. (eftekhari, 2002) Security in urban environment is related to the crime. Scientifically, understanding the consequences of a crime which means dreading it's happening is as important as it's result in statistical perils. (qharae, et al., 2010) In fact the field studies have shown that the amount of fear of a special crime happening in an urban area maybe much more than it's real amount of happening. In some cases a specific kind of crime may have stopped during a period of time providing inhibitory policies, but people's stereotype of that area would still be related to that crime. Normally this stereotype can have a great influence on citizens willing to attend an urban space. In fact the reaction to the fear of being a victim would cause lots of people to stay away from the dangers or at least reduce the chance of exposing the perils. This could cause the lack of presence not only in a specific place but in most public places. (punter, et al., 1997) Urban places as a bed for life and activity should be able to provide a safe, healthy, constant and attractive environment for everybody considering similarities and differences between people and age, gender, and social groups and be able to respond all strata and all needs. (shariati, 2005)

Summing up the effective factors in feeling unsafe in urban places

The effective factors in reducing security in urban places can be divided into for categories as environmental factors, structural factors, social factors and behavioral factors. Table1 shows these factors and their subgroups as a conceptual model for the present article.

The objectives of preventing crimes by urban designing

The new perspective of urban design is to prevent the crimes by means of urban structure and environmental designing. That would be possible by reducing the potential of commuting a crime or leading to a crime in urban areas. Therefore any action in urban structure should be done considering this. Today less attention is paid to the urban areas and building potential of reducing crimes. According to this urban designing or architecture in spatial designing or replacing either in the city site scale or in habitat or business plan scale should pay attention to the type of creating space which prevents decreasing the possibility of public observation or increasing the availability to crimeful areas.

The main objectives of urban designing in decreasing crime and villainy can be mentioned as:
1. Decreasing urban crime
2. Decreasing the crime potential in urban areas
3. Improving the quality of life
4. Increasing social prosperity and helping the victims
5. Increasing citizen’s satisfaction
6. Encouraging social strata to present in the town
7. Increasing cooperation

Picture 1: (Lahijan) [25]
Methods of preventing crimes by environmental design in Iran’s urbanization

The most important factor for preventing crimes by means of environmental design in Iran’s traditional urbanization is increasing population and inhabitation density by neighboring the houses in the town which would make public observation on trade and habitat areas about the availability in urban places possible. "Neighborhood" in traditional urbanization is the language structure of traditional urbanization which beside increasing social interactions would make the citizen’s superintendence on the realm of the city possible.

In traditional cities everybody would consider her/himself as an owner of the city and respect the neighbors and his/her privacy in urban spaces. For instance for reaching house the invader should pass the areas with some absolutely defined spaces and was in visible. If he/she intended to enter a house he/she had to pass a route which was well defined and full of the spirit of social presence and superintendence.

The conception of unprotected areas

Areas which their structure would make committing crimes easy, are called unprotected areas. Unprotected areas are places which belong to nobody and hence nobody maintains them and are hidden from sight, Therefore ar considered as cosy comfortable places to do illegal activities such as: under the bridges, inside the underground paths, sky ways, deserted lands, ruins.


Each structural form receives specific kinds of crimes. Hence not every crime happens in every space. For example a pickpocket needs a crowded place while an addict needs a cosy hidden place to use the drugs. Considering the structure and physical form of the space we can present various types of space and mention the application of each regarding each specific type

Types of unprotected areas:
1. lack of caretaker or lack of the owner’s presence: gathering of tramps and using drugs
2. unfinished and abandoned building: disposition as a shelter, actions requiring hiding, drug using
3. invisibility, hidden space: mugging, rape, male sting specially girls
4. corners: leaving herbage, gathering of jobless youngsters
5. unfinished or stopped projects: drug using
6. lack of light: rubberty, theft
7. L and U shaped surfaces of the streets and alleys: leaving garbage
8. underground path and under bridges: drug using, lottery, vagrants
9. useless places or places which are not consequently used: in front of the offices, cinema exits that are used for some hours and not for some. (pashaee., 2008)

Introduction to the base of Lahijan’s design

Lahijan is one of the regions in guilan province which is located in the east part of it, and Lahijan city is its center which ends to Caspian sea from the north, Langaroud from the east, Deylaman from the south, Sialhkal from south west and Astane from the west, and that is in 50 degree 0 minuit eastern and 37 degree 11 minuit northern of the geographical latitude. The city is made on a flat plateau which is formed by the sediments of guilan’s rivers. Lahijan has a general southern steepness towards the north(sea). This city is higher than other cities in guilan, almost 20meters higher than Caspian sea and nearly 2meters higher than oceans’ levels. The weather in plateue part is moderate and humid and in mountainous parts it’s cool and pleasant.

Generally it is hot and humid I summer and I winter strong warm wind blow and after that it snows. (The centre of programming and finance of Guilan province)

Population

The region contains 2 parts: roudbaneh and central part and also 7 villages. The area is about 4% of guilan’s area and 35% of Iran’s. The population growth rate during 50 years from 1335 to 1385 is 2.5% per year. (Iran center of statistics)
The birth of Lahijan

Guilan use to be divided into 2 parts “bieh pas” and “bieh pish”. Bieh pas or upstream centering fouman included western parts of sepidroud river and pieh pish or downstream centering lahijan included eastern part. Lahijan is the center of a wide area which has been the habitat of Iranian folks since 3000 years ago. Lahijan as mentioned in history used to be the capital of bieh pish state and used to spread from sefidroud to Chaloos. (The centre of programming and finance of Guilan province)

Constructing the town in contemporary time

The main street an central square of the city in the south of Ordou Bazar which the main Rasht-Lahijan-Langaroud roud is connected to that, constructing a street from Kheshteh pol to Chahar Padeshah and to Shah Neshin mountains, the lake and the connectivity to Lnagaroud road and also constructing the road in the northern edge of the city has caused the linear development of Lahijan in eastern-western direction (picture1).

Evaluating the unsafely in urban spaces in Lahijan

In this parts, using the uptained factors in the previous part Lahijan has been evaluated considering the effective factors in feeling safe and secure in urban spaces. These parts contain
1. Traditional context of the city(central part which is more than 100 years old)
2. suburban context(undeveloped and informal parts in suburban parts)
3. New part of the city(constructed in present decade)

Based on this, these areas which contain special social and structural characteristics have been studied based on the factors of study. this evaluation is presented in table2. It’s essential to mention that some factors such as neighboring natural and manmade areas, are observable in other parts of the town. But considering that as not equal for all, each part has been generally presented.

CONCLUSION

It is generally observe that effective factors in reducing spatial security are different in different parts of Lahijan. It is required to mention that the two groups of traditional context and suburban context have a more undesirable condition than the new context. Although it should be mentioned that despite proportional advantages these parts are not ideal regarding spatial security. The final conclusion of this study is that security feeling in different part of Lahijan is not very ideal, beside that different parts of the town are influenced by different factors hence it’s essential to do some special action in each part of the city in order to increase spatial security. It is evident that this article has been prepared based on the author’s cognition and mainly intends to revealing the problem and can be agreed by field studies and statistical data and then be fundamentally used for programming and doing the actions needed.

Suggested solutions

Since security is a very important and effective factor in a city, designing suitably and in accordance to the security and prevention factors is one of the most important factors to reach this goal. so it’s expected that architects and civil engineers pay more attention to the rudiments of secure and protectable space designing. the constructed environment would influence human behavior and can encourage a criminal to commit a crime offering the opportunity or on the other hand it can prevent committing crimes by increasing the inhabitants’ supervision applying a suitable design and inhibitory and security elements. Also with a suitable design and obeying the ground rule of security in that, it can control the citizens’ behavior in a special spatial farme in an urban space and decrease the conditions for committing a crime. It seems that in accordance to the practical solutions for urban and architectural design, some issues should be considered which applying them in the process of designing and constructing can provide organizing and forming a safe town by decreasing the capability of committing crimes in areas. Hence the following are suggested: reinforcing natural realms: in order to this, making people feel they own the town and the neighborhood, would lead to they understanding the town belongs to them and they should try to make it more safe and secure. Natural supervision: it seems that the citizens’ direct supervision on urban spaces should become possible and providing deserted and hidden places which would increase the potential of committing crimes should be inhibited. Supporting social activities: delivering
and designing social activities in potentially crimeful zones would increase people's supervision in these areas, hence by people passing them they would change to places for social interactions and citizen supervision. Teaching architecture and urbanization: since preventing urban crimes is not considered in urban architecture, it would be conferred that the reason might be the lack of teaching the rudiments of preventing crimes in environmental designing. It requires university professors paying attention to teaching this method of prohibition in designing and teaching architecture to the students, and if possible provide a lesson to teach and evaluate the role of designing in preventing crimes. National construction rules: In many countries there are rules and rule books for prohibiting crime in environmental design. And according to that rule book about national construction rules be prepared so that everybody would be obliged to obey that.

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