

# Renovation and Restoration of Urban Deteriorated Area in Ilam Center with Respect to Improvement of Urban Public Spaces Quality

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**ABSTRACT:** Today the quality of townscape, in the realm of renovation and restoration of deteriorated areas, is generally disregarded. These areas are mostly located in city centers. However, the low quality of townscape itself could be included among the elements of area deterioration and results in mental pressure and diminishing civic pride among the citizens. Concerning deteriorated area of commercial center of Ilam city as a case sample, in this article, firstly through library studies, the importance and elements of scape quality are determined. Then, applying field observations, it comparatively investigates the case sample and theoretical principles. Finally, after determination of site quality problems, useful suggestions are given in order to improve the quality of public space in Ilam center. Based on the fact that most of deteriorated area in Ilam center has not been organized yet, these suggestions could be highly influential in future improvements of spaces quality in Ilam center.

**Keywords:** Townscapes Quality, Deteriorated Areas, Ilam, Public Space, Renovation, Restoration

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## INTRODUCTION

Nowadays, most urban spaces especially in city centers, that have usually been the first cores of the cities and been surrounded with more updated urban areas, encounter extreme reduction of townscape quality. Present congestion in city centers, visual chaos of the facades, middle sub-spaces, the juxtaposition of inharmonious uses, mélange of pedestrians and vehicles and etc., are all the causes of the reduction of townscape quality that results in an undesirable feeling in people.

Low townscape quality, sometimes, makes tension and threatens the mental and physical health of citizens. Moreover, people's negative emotional evaluation of especial urban space, make them keep away from the space and prefer to go there only to meet their vital needs. The case decreases the times and length of their presence in the space that is followed by reduction of social interactions. In other words, it negates the role of urban space as the location of social interactions, especially present urban spaces in downtowns that are the cultural, entertainment and social centers of the city and have a lot of influence on the formation of citizens' individual and social personality and also the creation of their feeling of dependency and pride toward their city.

Regarding the mentioned matters and the negative influences of low townscape quality on people, parameters of townscape quality should be counted as the components of deteriorated area and concerned carefully in restoration and renovation of townscape.

In addition, the qualities are created based on needed minimums and quantities that have caused the reduction of townscape quality. Therefore, in this article we first try to identify the way of evaluating townscape quality by people and the influence of this evaluation on

them to include low townscape quality in the components of deteriorated area. Then, with the aim of the improvement of urban public spaces quality in Ilam center, the components of public spaces quality are determined in theoretical principles and by these components the quality of case sample is investigated in next section. Finally, some suggestions will be presented to improve public spaces quality in Ilam center.

## MATERIAL AND METHODS

Since this study is analytic-descriptive, first, applying library method, we examine the theoretical principles of the plan and determine the components of townscape quality. Then, using the library sources, the internet and field observations such as photography, we determine the quality of the selected site in Ilam center and present tables related to site analysis.

Townscapes are open and public spaces in the cities that, to some extent, are the crystallization of social life identity in which the social communications and interactions occur (Pakzad, 2009; Tavassoli, 2009).

The importance of townscapes encouraged Ruskin to concern the qualified townscapes as the symbol of grandeur of cities in a grand culture and finally the credit of that culture (Paumier, 2010). Also improvement of townscape quality increases arbitrary activities that lead to the growth of social activities; because social needs are usually satisfied indirectly and in the form of two activities, arbitrary and obligatory (Gehl, 2008). In order to improve townscape quality, at first, the concept of quality and the method of its evaluation by people should be examined.

Based on the definition, "quality" is a phenomenon that has emotional and rational influence on man.

Actually, the sender's message, after being received by the receiver's five senses, is perceived under the influence of personal characteristics and mental meanings such as background knowledge, prospects and emotional or intuitive provocative modes. Message perception depends on the ability and functional area of senses, environmental conditions, way of perception and mind capacity (Pakzad, 2009).

With respect to the ability and functional range of the senses, Jan Gehl (2008) presents five elements that enhance visual and aural communication and consequently perception. These five elements are absence of wall, short distances, low speed, single surface and face-to-face orientation. Environmental conditions are important provisions for perception. For example, if there is not enough light in environment, even with proper eyesight, one could not perceive the environment perfectly (Pakzad, 2009). Furthermore, the perception of environment by the senses such as sight, as the most developed sense in man, depends on the way of information reception by this sense. For instance, the sight perceives the environment in two ways, holism (gestalt) and reductionism. In fact, man is more interested in connecting separate stimuli and perceiving them as a whole, not analyzing them; because analysis needs high effort and energy and this means the reduction of tension (Grutter, 2007).

The two mentioned theories complement each other and sometimes as the case may be, one method overtops the other. Man who is the receiver of the message is only able to receive limited pieces of information as a picture of a whole at a time. If he receives more information, his mind has to ignore this information or apply reductionism. At a time of encountering a building, the first thing which is recognized is gestalt or the whole shape and in next steps the parts will be perceived (Pakzad, 2009). In addition to the way of sight perception, present unity and coordination in space totality, has been realized by a lot of people such as Alexander Pope and Andrea Palladio (Shammai, 2010) as the cause of "beauty" in architecture and according to Lang, visual beauties are man's needs that have to be fulfilled by the environment (Lang, 2008). Therefore, regarding the way of sight perception of the environment and man's need for visual beauties, using a simple order that is easy to understand and specific to a townscape, for the whole body and more complicated order on body details such as all façades, which leads to their individual legibility and reduces body monotony, seems adequate in the frame of total order of space body. Respecting last influential case on man's perception which is mind capacity, Kahneman's theories are helpful. He states that any activity performed by mind limits some part of mind capacity. Meanwhile, more difficult performances occupy more capacity.

Moreover, according to Mehrabian, three features of environment such as intensity, novelty and complexity, which need to be more concerned, limit mind capacity more than other features of environment (McAndrew, 2008). Therefore, in order to improve the environment perception, it is necessary to concern information storage; because the people who use townscapes have different mental involvements and their minds might not have enough space to receive the whole storage resulted from the complexities of environment.

Matters which are perceived from places, things or specific events have meaning for person and are evaluated by him; then the emotional quality of environment such as disgust fullness, boringness and etc. is determined. Emotional and motivational quality of environment is the most important part of man's relation with the environment; because emotional quality of environment, which is the main cause of determining treatment and memories related to special situation, could influence man's health. Also descending quality of environment could cause stress in people in some cases such as daily problems including congestion or trips in the city (traffic) and too much evaluation of ingredients of environment. Long-term stress in environment could cause disease and physical complaints about high blood-pressure to lesions and mental problems such as drug abuse, depression and personality disorders. These problems result in people detachment from society; because people who live in jumble and congestion might adopt a life style based on social detachment to tolerate excessive burden of environment. In order to prevent stress and improve the quality of environment, it is necessary to refer to three dimensions, pleasure-unpleasure, motivation-prevention and dominance-obedience that have an important role in people's emotional evaluation and predicting their treatment. Each dimension is independent of the others.

Therefore, the feelings related to one dimension might change while the feelings of other dimensions remain without any changes. Different compounds of motivation, pleasure and dominance bring about sensory experiences. For instance, feelings of low pleasure and motivation along with high dominance lead to boredom and feelings of low pleasure, high motivation and low dominance result in anxiety. Pleasure-unpleasure dimension presents the amount of one's happiness and satisfaction against sadness and dissatisfaction. Motivation-prevention dimension could be concerned as a compound of (energetic against weak) activity and awareness (perfect wake against drowse). The scores of motivation in this dimension are high when both activity and awareness are high; there are average scores, when one is high and the other is low and low scores when both are low.

Finally, dominance-obedience dimension depends on the level of people's dominance on the environment and their cognitive control on the environment (McAndrew, 2008). Legibility is one of the parameters that increase people's dominance on the environment. Regarding legibility, clear differences and contrasts between spaces are helpful in keeping them in mind. (Cullen, 2008) It seems that the things, known as elements of legibility in Lynch's research, were truly the clear and memorable differences of townscapes such as signs, nodes, ways, ledges and districts (Lynch, 2008) which had been recorded in people's minds. Moreover, the beauty of environment (harmony) is imaging by its nature and could be used as an agent to increase the legibility of environment. (Taylor, 2009) Hence, whatever creates dissatisfaction in people (environment pollution, air pollution and high temperature, etc.), too much motivation (for example, information overload in environment) and indomitableness (for example, darkness and difference of surface levels) returns to the space and should be eliminated from the townscape. In other words, the

general concept of safety means to establish trust and mental and psychic comfort (Dehghan and Mandegari, 2010) in environment so that the townscape would be counted qualified by people.

The above mentioned reveals that the low townscape quality results in people's avoiding treatment toward environment and also their infection with mental and physical diseases. Therefore, low townscape quality could be counted as one of the components of area deterioration. Furthermore, such a townscape is not sustainable and not responsible for all man's needs. Actually these matters agree with the definitions of deteriorated area.

According to Andalib (2010), "deteriorated area is an area of the city in which the citizenship values abate and the residents are not satisfied with their life conditions, don't feel safe and their primary needs are not fulfilled."

As Pourjafar states, "urban problematic areas are areas in which, for some various causes and elements, the

qualitative values abate in physical, functional, environmental and social-economic cues that bring about physical troubles and many negative social effects for residents. Consequently the intention of departure from these districts and emigration grow."

## RESULTS AND DISCUSSION

Regarding the importance of the improvement of public spaces and as a result of years of research and scientific projects, some theorists have defined approximately same components, however their classifications are different. Among these theorists we can refer to Jan Gehl in *life Between Buildings* (1971), Ian Bentley et al in *Responsive Environments* (1985), Cy Paumier in *Creating a Vibrant City Center* (1988) and Francis Tibalds (2002) in *Making People-Friendly Towns*. In this study, these components have been presented with renewed classifications in Tables 1, 2, 3, 4, and 5.

**Table 1. Legibility**

		Descriptions	
Legibility	Body legibility	<b>Hierarchy of streets</b>	The feeling of hierarchy could help legibility by making difference between streets widths and design of sidewalks and landscape design of streets.
		<b>Open spaces (public spaces)</b>	When open spaces are located carefully in general pattern of streets and blocks especially in junctions, they improve legibility of the coral structure of city center by creating highly observable signs.
		<b>Geography</b>	Reliefs, views and landscapes and other natural features, especially watercourses, could give a special identity to the city and its central area.
		<b>Facades</b>	Creating a typical and ordered totality in facades has a great influence on people's mental imagination and environment legibility. In this respect, in order to create a typical totality, it is necessary to concern vertical weights (rhythms), horizontal weights (rhythms), skylines, wall details (materials, color, pattern, etc.), windows, doors, components and elements of the floor and also the created enclosure by facades and sometimes other components of environment.
		<b>Middle sub-spaces</b>	The coherent usage of components of environment in the frame of united whole has great influence on the general character and legibility of public territory.
		<b>Signs</b>	Since the signs are discriminated in the environment, they help orientation in the environment and create legibility of environment.
	<b>Functional legibility</b>	The uses might be also placed on mental imagination as big as the body and without much concern. However, the form and function should reflect each other and their composition should be legible.	

**Table 2. Climate**

		Descriptions
Climate	<b>Green infrastructures</b>	Using green infrastructures in city center improves the conditions of small hemisphere and has positive influence on people's emotional evaluation.
	<b>Architecture compatible with hemisphere</b>	Using regional appliances in townscape creates comfort in people and forms a positive picture of space in their minds.

**Table 3. Variety (diversity and flexibility)**

		Descriptions	
Variety (diversity and flexibility)	Variety of facades	<b>Visual variety</b>	Façade complexities such as various materials, visual conflicts, surface difference and using three-dimensional poses in façade (in case other environmental information is not enough) cause intuitive enrichment. Also creating inconsistency in the way such as making niches on ground-floor facades for standing, watching and sitting, and etc. adds variety to the environment.
		<b>Functional variety</b>	The variety of uses and activities and the ability of environment in gaining new and needed activities for space, create animation, attract people to the environment and increase its complexity and novelty.
	Variety of middle sub-spaces	<b>Visual variety</b>	Visual variety of environment components should be balanced so that it prevents visual chaos and disturbance of environment totality.
		<b>Functional variety</b>	The function of middle components should be able to meet different needs of people in townscape. Moreover, the inner sub-spaces should be all-purpose and/or able to be set or removed easily.

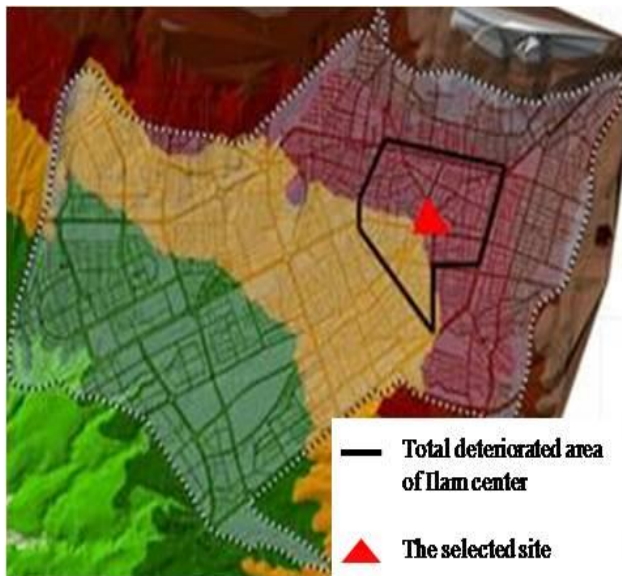
**Table 4.** Permeability and ease of access

		Descriptions	
Permeability and ease of access	Vehicle	<b>Range of permeation</b>	Permeating into the site by car with logical walking distance of 10 minutes from the parking to the city center, facilitates access to the functions.
		<b>Parking</b>	Preparing enough parking lots for people increases their access to the site and feeling of satisfaction.
		<b>Public transportation</b>	Using public transportation as a link between the city center and other parts could extremely decrease the use of personal cars and the traffic jam and its harmful effects on people.
	Pedestrian	<b>Walking routs</b>	Using walking sites reduces the transmittal of CO2 gas and vocal troubles resulted from transportation and etc. that will have great influence on the growth environment quality.
		<b>Ease of access</b>	Using too many changes in surface and too many signs and signals in improper scale or directions reduces true perception of environment and prevents easy access to uses.

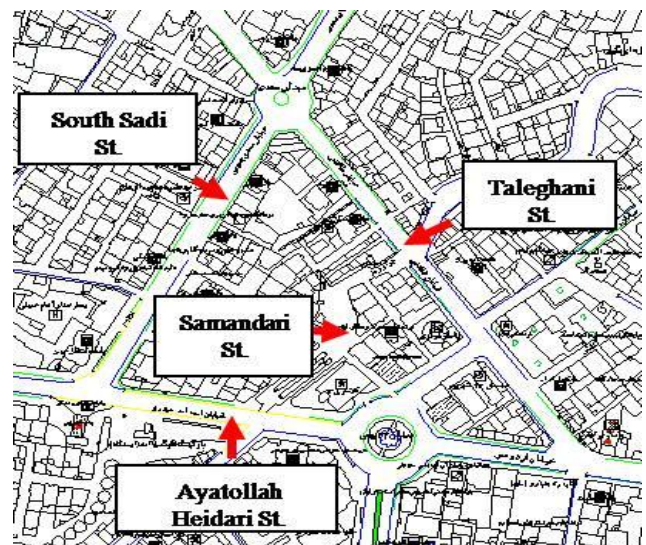
**Table 5.** Safety

		Descriptions	
Safety	Feeling of life safety in environment	<b>Safety against vehicles</b>	Creating feeling of safety in people against vehicles via different ways such as creating feeling of separation and protection of walking area and ... leads to people's mental comfort.
		<b>Safety against other environmental factors</b>	Enhancing the feeling of safety in townscape by activating uses and night activities in streets and public spaces and also adequate lighting of ways and corners, increase townscape quality.
	<b>Feeling of physical safety against the components of environment</b>	Using adequate materials in the flooring of pathways and preventing unnecessary height changes that are dangerous for pedestrians, Improving the level of fixing and maintaining pathways and public spaces to keep the city center clean and its perfect organization, increase people's physical and mental comfort.	

The selected site with an area of nearly seven hectares has been located in the basic core of Ilam. This site has various uses which are mainly commercial and almost used by all people of the city. There is a stream passing through the site that has turned to sewage and its surface has been covered by concrete blocks. In figure 1 the deteriorated area of Ilam and in figure 2 the selected triangular site has been presented. This site encounters a lot of troubles such as mélange of pedestrians and vehicles (figure 3), disharmonic facades (figure 3), lack of parking lots in needed numbers and etc. Tables 6 to 10 present the positive and negative feature of the site based on the classified parameters of townscape quality.



**Figure 1.** Ilam map and the deteriorated area in the middle of the city Source: Bahavand Mehrzad Consultants Company, 2010



**Figure 2.** The selected triangular site Source: Bahavand Mehrzad Consultants Company, 2010



**Figure 3.** Parking cars in the middle of the site (Samandari St.), 2011

**Table 6. Climate**

		Strong points	Weak points
Climate	<b>Green infrastructures</b>	Presence of rows of trees in the site	Using small and improper vases in space which cause more chaotic space.
	<b>Architecture compatible with hemisphere</b>	Presence of trees with proper shade, 2. Adequate height of old buildings in the site which do not shade streets in cold season.	New 6-7 story buildings that shade the streets, 2. Lack of suitable sunshades in warm and cold seasons, 3. Flooded streets in rainy season

**Table 7. Legibility**

		Strong points	Weak points	
Legibility	Body legibility	<b>Hierarchy of streets</b>	Hierarchy is an influential element in the legibility of Ilam center	-
		<b>Open spaces (public spaces)</b>	The wide street on the passing stream through the site	Absence of adequate public spaces and their limitation to surface streets, squares and parking spaces
		<b>Geography</b>	Appropriate view to the mountains around Ilam from some spots	Improper use of site inclination in landscaping, 2. Improper use of the stream and turning it to a sewage
		<b>Facades</b>	1. Human scale of older area of the site which is comprehensible and lovely, 2. Smooth skyline of older area of the site	1. Lack of united totality in facades, 2. Concealment of floor façade by a row of similar trees and absence of many upper stories, 3. Vacant lots and height difference between the buildings, especially the new and the old ones, cause damage to the enclosure of facades, 4. Intention to build high constructions and attaching the lots
		<b>Middle components of space (furniture and plantings)</b>	Row of high trees in the site to some extent hides the façade chaos including store signs of the floor	1. Lack of improper, compatible, and identifying design of the middle components of space, 2. Similar trees on site's three main streets that causes illegibility
	<b>Signs</b>	Spatial contrast and other signs such as the present icon in Bahman 22 Square and other distinctive buildings in space	Visual chaos and lack of a comprehensible background prevent perfect perception of the present signs	
	<b>Functional legibility</b>	Remembering the places based on their uses; for example, snack bars on South Sadi St.	Inconsistency between body and function of some buildings in the site	

**Table 8. Variety (Flexibility and variety)**

		Strong points	Weak points	
Variety (diversity and flexibility)	Variety of facades	<b>Visual variety</b>	Each façade especially the new one has its unique appearance	Too much variety of facades results in chaos and lack of order and harmony in present buildings
		<b>Functional variety</b>	1. Mix of uses in the site, 2. Temporary uses and hucksters in the site which create attraction	1. Absence of needed sport and entertainment uses in the city center, 2. Tendency for land assemblies in the site and disappearance of some uses because of delay in paying rents, 3. Presence of some incompatible uses in environment
	Variety of middle sub-spaces	<b>Visual variety</b>	-	1. Absence of adequate furniture or proper physical design in space, 2. Too much variety of space components including stores signs that has caused visual chaos, 3. Presence of some service uses such as public restrooms in an undesirable way and with improper design
		<b>Functional variety</b>	-	1. Lack of appropriate benches, 2. Lack of flexible furniture in space such as temporary sunshades for people that make them to use their personal stuff, 3. Improper and single-use edges of space components including the edges of green spaces and stairs

**Table 9. Safety**

		Strong Points	Weak points
Safety	Feeling of life safety in environment	Safety against vehicles	Distinction of sidewalks with adequate width from carriageways in some spots of the site, 2. Existence of crosswalks in some areas
		Safety against other environmental factors	Adequate lighting of some of the streets at night
	Feeling of physical safety against the components of environment	Proper difference in surface levels in some spots of the site	1. Formless height difference between surfaces in some spots that trouble the passengers, 2. Garbage piles and stream of dirty water in the middle of the site, 3. Open gutters in the site

**Table 10. Permeability and ease of access**

		Strong points	Weak points
Permeability and ease of access	Vehicle	Range of permeation	Access to the site uses on foot or by car
		Parking	-
		Public transportation	Bus terminal near the site and also some spaces for taxis in some ways
	Pedestrian	Pedestrian realms	1. Proper width and paving of the sidewalks in some parts of the site, 2. Some covered shopping malls for pedestrians in the site
		Ease of access	Short width of the blocks and ability of visual and physical permeability into the site

**CONCLUSION**

This article proved the importance of improving public spaces quality and its role in physical and mental health and also the feeling of civic pride and classified the low quality of environment under the parameters of area deterioration. Moreover, the determining components of environment quality were delineated and the case sample was examined.

Regarding the above investigations and analyses, here, some suggestions are presented to improve the weak points. Paying attention to these suggestions with a concern to the fact that most of deteriorated area in Ilam center have not been organized yet, could be so influential in the future improvements of these spaces.

**Legibility**

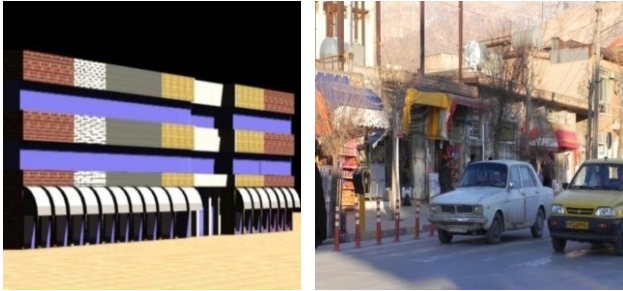
- Turning the middle street to a public space by eliminating old buildings which have overstepped the stream frontage and omitting the parked vehicles on it (Figures 9 and 10).
- Discriminating the surface of the sidewalks from streets, especially in the nodes to create open civic spaces that are places of social interactions and the performances of some temporary activities (Figure 11).
- Preparing a case made up of light materials in order to create unity by arranging the signs and tableaux on South Sadi St. facades with regard to the fact that some buildings there have been renovated in a dissipated and unique way (Figure 5 and 6).
- Concerning different patterns on both Taleghani and Ayatollah Heidari streets facades with regard to the fact that almost all buildings on the bank of these streets

are deteriorated and it is necessary to restore and renovate them. As mentioned above, totalizing the space means at least two of the components of space be similar to each other and the more they are similar, the more the arrangement is in the space and space totality declares itself. Meanwhile, there are some suggestions regarding the renovated facades:

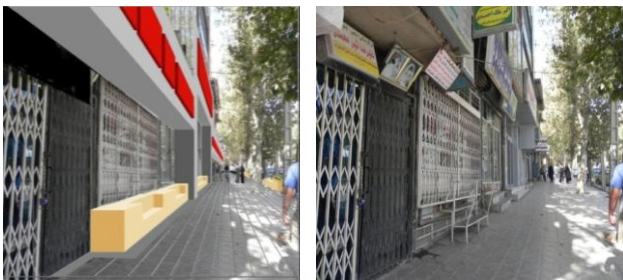
- ❖ In the case of building assembly, it is possible to totalize the façade by assimilating form, size and color. It is necessary to concern the fact that people remember the spaces, even with slight differences or little signs in the space, by their uses, names and locations. Therefore there is no need to create variety of contrasts in form, size and color.
- ❖ Without assembly, it is possible to design different buildings, along with freezing the form, size, color and materials (Figure 4).
- ❖ In other case to select various forms along with freezing color and materials in the façade (Figure 6). It is important to emphasize the point that in all suggestive plans the purpose is the reduction of information load of environment by slight and careful contrasts. Moreover, in all cases signs locations have been delineated.
- Determining a different and identifying pattern for the middle part of the site (Samandari St.), because the deterioration of most buildings on its facades. Also presence of the stream form makes it possible to concern an identifying façade for this street. Some functions of this pattern, attached to the buildings facades and made of a case in the entrances, are providing adequate enclosure, defining main and subordinate entrances in the middle part of the site, attaching facades to each other and making an all around awning instead of present colorful and disharmonic sunshades in fruit and vegetables outdoor

market. In addition to this pattern, rhythmic and proper design of fruit selling uses on this street and identifying lighting of this space at night (Figures 9 and 10).

- Harmonizing entering stairs of the buildings, awnings, signs, flower boxes and other space furniture with each other in various aspects of form, height, color and materials (Figures 5 and 6).



**Figure 4.** Current facades and suggested ones on Ayatollah Heidari St.



**Figure 5.** Organizing facades and furniture on South Sadi St.



**Figure 6.** Organizing facades and furniture on South Sadi St.

**Variety (diversity and flexibility)**

**Form variety**

- On South Sadi St. there is no problem in designing unique buildings, because totalizing method for this street is different with others. However, it is indispensable to limit the number of floors to three.

- Using creative forms and façade complexities, including the ledges, based on determined regulations and without destroying total order and specified horizontal and vertical rhythms. In this case, there is no problem in performing Figure 6.

**Functional variety**

- The possibility of creating residential, commercial and entertainment uses; because the maximum of floors in this site is three and most present deteriorated buildings have one or two floors now and it will be increased after the renovation (Figures 7 and 8).

- Preparing needed furniture of the space including awnings and benches, taxi stands, bus stops and etc.
- Organizing the uses in the middle part of the site and heterogeneous uses in following ways (Figures 9 and 10):

- ❖ Providing a space for selling fish and poultry with proper design, concerning the present vacant lot. In order to gather the scattered stores of fish and poultry around the site and prevent their current pollution.

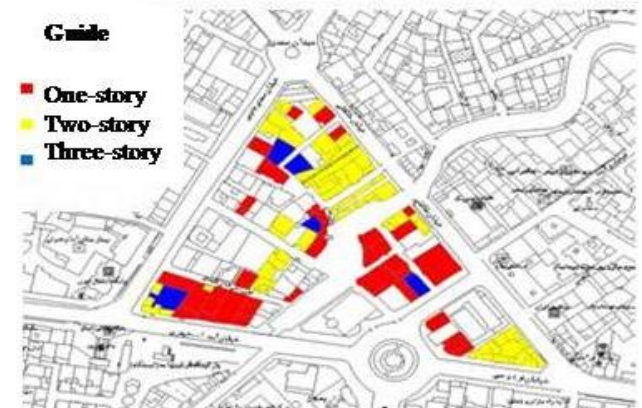
- ❖ Renovating the façade of grocery stores in site lanes (e.g. A in Figure 9) to organize the space.

- ❖ Transmitting present fruit stores in lanes (e.g. B in Figure 9), as a cause of pollution, to the middle part of the site in the parking facades that have been designed for this purpose.

- ❖ Making the level in front of fruit stores lower than the level of middle part of the site so that it prevents dirty water to flow into the middle and providing adequate ramps and stairs for it. In this case, after washout or flowing of surface water in these spots, water passes through at least a simple filter, loses its dross and flows into the stream.

- ❖ Placing mechanized recycle bins in alternate spots on the earth and before each store. Via this method the garbage is hidden from people’s sight and the need for recycle bins would be fulfilled.

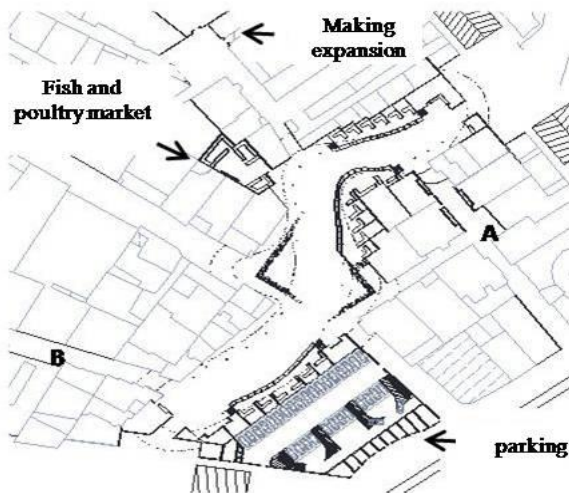
- ❖ Designing an icon in the middle part of the site including flower box, seats and waterfront that provides people with short standing and taking a break and adequate lighting of hidden part of the icon at night (Figures 9 and 10).



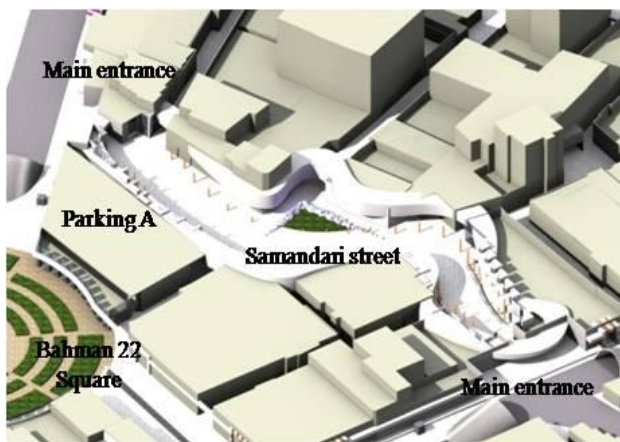
**Figure 7.** Number of increasing stories through organization



**Figure 8.** Available area in case of assembly and renovation at the same time



**Figure 9.** Organizing the middle part of the site



**Figure 10.** Organizing the middle part of the site (Samandari St.)

#### Permeability and ease of access

- Organizing the signs and improving facades so that the signs could be comprehended better (Figures 4, 5 and 6)

- Using parking structures with capacity of 180 cars in order to eliminate parked cars on Samandari St. and other lanes of the site. The capacity of this parking has been measured based on the area of present land and also the authorized number of floors. The parking is located on first layer and in the place of the old building that should be renovated. The façade of parking floor has been specified to commercial uses, avoiding visual interruption and monotony (Figure 9).

#### Safety

- Discriminating streets from sidewalks, especially in the nodes in order to provide safety for pedestrians and reduce noise pollution (Figure 11).

- Restoring light condition and activating night uses.

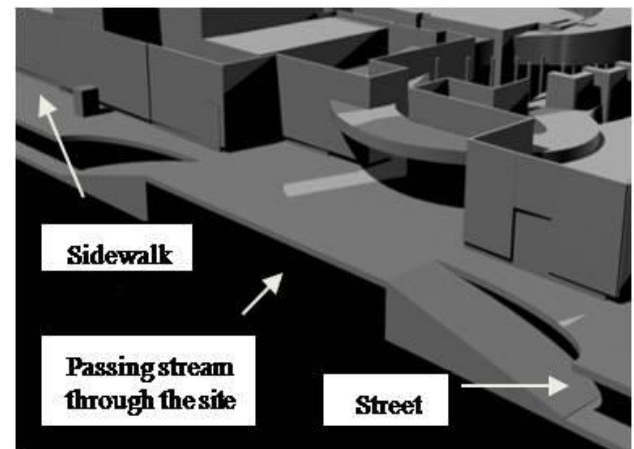
- Solving the problem of improper level difference by creating ramps, stairs, etc.

#### Climate

- Presence of the stream makes it possible to make a greenway before and after the site.

- Using the stream water for irrigation of green spaces in the site in half-yearly.

- Respecting parameters of architecture which is harmonious with hemisphere in other buildings, under renovation and restoration in the site, including observing authorized height.



**Figure 11.** Discriminating sidewalks, streets and passing stream from each other

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