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(Universita Degli Studi di Roma “La Sapienza”)

Department of Architecture and Design
(Dipartimento di Architettura e Progetto)

Architectural Theory and Design Course
(Architettura. Teorie e Progetto, 26th Ciclo)

Quality of life improvement in historic and old neighborhoods through architectural and urban revitalization
Case Study: A historical neighborhood of Tehran, Iran

July 2014

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"Submitted in Partial Fulfillment of the Requirements for the Degree of PHD in Architecture, Theory and Project,

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Acknowledgement

I would like to express the deepest appreciation to my tutors, Professor Lucio Barbera and Professor Hassan Osanloo for providing me an opportunity to do my thesis. Without their guidance and persistent help, this dissertation would not have been possible. I would like to thanks to Prof. Anna Irene Delmonaco who introduced some references to me and for her kind co-operation to the completion of my thesis.
In addition, a thank you to the officials and other staff members of “Department of Architecture and Design” who helped me during the period of my thesis.
Also there are a number of people without whom this thesis might not have been written, and to whom I am greatly indebted.
To my dear husband, Hamidreza for his practical and emotional supports.
To my dear parents, Naser and Zarifeh who have been a source of encouragement and inspiration to me throughout my life and particularly during the period of my thesis.

July, 2014
Abstract

Historical neighborhoods are important parts of cities that constructed for the purpose of life. Modernity changes had some influences on them, because they could not adjust themselves with modernity changes. Thus social, physical structure, environmentalism and functional characteristics of these neighborhoods have been annihilated and many of residents migrate from these areas.

Revitalization of deteriorated areas contains renewal of physical context, creating active economy and social interactions. Improving the physical structure of neighborhood by using physical revitalization has been considered in this study.

Case study has been selected at the north of Tehran, capital of Iran. It is an old area with historical elements and deterioration indicators. The thesis theoretical framework has been formed based on revitalization method. In addition to organist approach which is provided from theoretical gathered information.

The results indicate discontinuity in the spatial structure of the studied neighborhood. Lose of physical identity of area causes lose of continuous social structure between residents, in other words it may causes less social interactions. The results show the improvement of physical structure, creates social interactions and high quality of life in social, economic and environmental aspects.

Key words: Revitalization, neighborhood , physical structure, quality, social life
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CHAPTER 1: INTRODUCTION

1-1. Introduction

Modern human interpretation of environment and his type of amity with environment created structure that tour connection between past time and current city or historical area. This aspect of separation also reduced social communications. Modern urban system tour social and local structure of city and human as a separate object of environment just became observer of unilateral decision of city managers and peoples role has been reduce in managing and building city. In fact, this local and social separation has been created based on economic efficiency and inattention to social interests. Disruption of social and economic relations and its effect on the physical development of cities, created some abnormalities that increased abandoned lands, land use change and lack of security. (Khani et al, 2009, 80).
Social organization and communication between residents is one of the main characteristics of historical neighborhoods and when these areas are affected by changes in land use and being abandoned, social structure as a basic definition of a historical neighborhood disappears and its undesirable effect on other neighborhood characteristics will destroy neighborhood's structure. So we can improve social and local structure of neighborhood and its social and physical identity by improvement of physical structure. In this research has been attempted to help neighborhood structure, its local identity and life quality improvement by using potentials of historical areas and physical design.

1-2. Problem expression

From past centuries, residential neighborhoods of cities had main role in life of residents as cells of urban life. Urban neighborhoods were locations for gathering people with common features such as social, economic and religious features. Thus that part of city had special identity which was different with neighbor areas. Also their identity created spaces with special functions that distinguish it from surrounding areas. A certain way of life among people who live in a neighborhood, often create common goals and interests for them. (Hoodsani, 2005, 3)
Another factor that helps to create a neighborhood identity is having a historical or architectural building. These neighborhoods known as a historical neighborhoods and
get more attention and support. Changes that have occurred in recent years in the urban areas caused changes in the structure of neighborhoods, thus Spatial structure of many neighborhoods that were combination of activities, physical elements, social interactions, accesses and public places had been destroyed. This damage is affected social life of residents and became a threat to identity of neighborhood. This problem was more at old areas because so many economic and social abnormalities were created in old areas. It causes native people leave the area and non native people choose that area for living, so this factor is a major threat for neighborhood social life and its identity. It is necessary that each neighborhood's structure be distinguishable from surrounding neighborhoods. This structure is a network of economic, historical, social and physical characteristics.

In this research, case study is a neighborhood at east-north of Tehran entitled Vanak village. This neighborhood is rural area that is located in Tehran because of rapid growth of city. This neighborhood lost its ecologic and human relations and could not coordinate itself with rapid growth of Tehran. So there is misbalance between this area and its surrounding. Also Vanak village has lost its social interactions because of disconnection between spatial, physical and social structure of neighborhood.

1-3. The importance of subject

Urbanization provides quality of life for citizens to live in prosperity. Urban areas and neighborhoods have some differences of physical quality and level of life that is usually considered reasonable and acceptable for citizens. In other words, level of development and quality of environment is medium. In some urban areas and neighborhoods, average of development and quality of environment is very lower than urban medium average. This imbalance causes many social and cultural problems. Also it causes disconnection in spatial structure of neighborhood and cities. During the recent decades excessive development of urbanization, immigration and population growth and various social and economic programs has changed main economic structure of country and distribution of population in cities and villages in Iran. One of the phenomena which created more changes in some areas and urban life structure is immigration from village to city in recent years. It destroyed fixed functions of traditional and historical areas. Also it decreased the level of culture because there are many differences between thoughts and
life style of rural people and people who live in city. Another factor that made some changes in urban physical structure (neighborhoods), was new physical planning such as construction of new roads, renewal of traditional neighborhoods, construction of huge residential buildings and changing urban land uses. Construction of highways destroyed many urban neighborhoods. Neighborhoods are look like an island in the city which is surrounded by urban highways and it is not simple to exit from these neighborhoods. Urban neighborhoods that played role of social support place for their residents now are just a dormitory for them because of complexity of life conditions and continuous increase of spatial and social separation. Unfortunately in recent years in our country, urban neighborhoods experience many problems, because there is not enough social and physical planning system. Quick urban development in Tehran decreased efficiency of neighborhood environment. Change in physical and structural space of cities and inefficiency of traditional areas are most reasons of existing problems. Therefore, with attention to the relationship between neighborhoods' physical structure and social life, it is necessary to change both physical and social aspects to revitalization of special characteristics of area that are important for making identity of neighborhood. Many of urban historical neighborhoods which were destroyed and renovated at 1950 &1960 decades are revitalizing now to use as parts of lively of city. This improved prospect of life often can have some new functions such as housing, tourism and related facilities. By this way historical and traditional neighborhood becomes attractive place again, which can be a good place for investment, life, socialize and having entertainment. Revitalization is necessary for all parts of city not just for them that have history, however when historical characteristic is more, area's protecting and revitalization possibility is stronger. Social activities that happen in spaces continuously make important and dynamic spatial structure. Land uses and public spaces can be spaces for social interactions at neighborhood. This interaction can be a factor to improve of spatial structure and to solve local problems. A good physical design improves social interactions and public spaces in a neighborhood, especially in areas that are old and destroyed. Also it helps to revitalization of neighborhood and its identity. Aim of this research is to use physical revitalization principles in neighborhood spaces to improve social relations in Vanak. It seems doing these researches provide opportunities for changing policies and urban development planning in the future.
1-4. Thesis questions

Questions are proposed in this research include:

- Is it possible to improve neighborhood's structure, residents' quality of life and social activities by revitalization of neighborhood spaces?
- What are components and design criteria to revitalization of Vanak village and similar neighborhoods in Tehran?

1-5. Thesis objectives

- Identification of physical effective factors to improve the neighborhood resident's quality of life.
- Improvement of neighborhood residents' life quality by using physical revitalization principles extracted from urban design.
- Neighborhood identity Revitalization by improvement of neighborhood's structure.

1-6. Thesis assumptions

- There are physical revitalization and renewal policies that are extracted from urban design process to improve ancient spaces that have historic concinnity.
- It is possible to improve neighborhood residents' life quality by improvement of spaces.
- Social life of neighborhood's residents is important effective factor of ancient neighborhood's identity.
1-7. Background to the research

Effective behavior with valuable heritage of the past time is one of challenging issues. The importance of historical and traditional neighborhoods and areas has been reassessed from 1970 decade. In 1972 at congress of Rome, there was an emphasis on a sentence that was "originality and character of all of parts of the city must be protected". Thus historical buildings and their surroundings, also interior and exterior signs of building that are spaces with special culture and civilization must be protected. (Habibi, Poorahmad, Meshkini, 2007, 82)

First policy about protection of historical neighborhoods involved just buildings. This kind of protection often was national or religious. This means some buildings that were great symbol of country's history were protected or they were buildings such as churches in England and France. The effect of this kind of protection was very limited. Historical buildings Protection developed by changing to regional policies. Second step of protection or maintenance policies attend to complex of historical buildings, landscapes and spaces between buildings. This kind of protection occurred in many European countries. Among them the first one was "monuments law" in 1961 at Netherlands, that was followed in France with law entitled "livestock's way". In 1967 the UK "Urban Facilities law "was approved and in the same year, "Urban Planning Law" in Italy and finally in 1973 "historical buildings and monuments low" was approved in Turkey. Attention to neighborhoods functional characteristics and active economy of protected buildings In addition to having visual, architectural and historical qualities, also was raised as a preservation issue. The second policies to protect, was approved in many countries in a period of sustainable economic growth. However, in most countries, necessary policies were performed during economic recession period that was happened in the early 1970s following the collapse of the property's value. Moreover, during the 1960s and 1970s, in United States and many European countries among neighborhoods rehabilitation and renovation began to identification of old houses that were remained safe from destroying. However, the Economic recession was an obstacle for economic growth to revitalize neighborhoods that were protected. In most countries, protection of buildings changed to regional protection and the protection changed to revitalization and rehabilitation. In the same time field of professional work changed from architectural and art to urban planning that included economic
development. Protection of buildings and spaces separately was considered necessary but not sufficient. Also protection concept changed to an inseparable part of urban planning and developed. Thus land uses in now and future, accesses, population and social issues are important in protection. As a result the third part of policies was created, that was native. These new policies were in relation with neighborhoods revitalization and protected historical areas. Also there was investment and improvement of local economy to provide found for neighborhood protection and improvement. There is not any important action to intervention in ancient areas until period of 1888-1906 in Iran. But Reza khan's period was first step of physical intervention. Also after Islamic revolution, intervention in ancient areas and cities took place again because population was increased and cities were developed. The war between Iran and Iraq was the second step of physical intervention. On that time ancient areas were forgotten and went into deterioration more and more. (Azizi,2000,37-47).in 1977, Dr.Falamaki wrote a valuable book entitled " Revitalization of historical buildings and cities" he survived theories, current methods of renovation, surveying method of old buildings in part of architectural and relation with environment, steps of residential centers development and factors of historical cities deterioration. Also he suggested some methods such as health care and technical plans, decorative scheme, reconstruction plans and comprehensive plan of urban restoration.

(Falamaki, 1996, 54) However, a comprehensive research of analysis of intervention policies of ancient areas and old cities can be seen less and there is not specifically research about that. But there are several projects for neighborhoods such as Saboonpazkhane and Oodlajan in addition to renovation projects of old urban areas. All of them focus on revitalization issues and fewer attend to its influence on social relations. But in recent years this subject has been important and many of experts and scholars studied about that in Iran and its result were some articles.

1-8. Research Methodology

This research based on description analysis method. In addition, some other methods such as site visiting applied in data gathering. Research process is based on urban design's current methods. It involves the following steps:
• Extracting basic concepts from Documents and scientific literature In order to obtain the principles and framework for intervention.

• Studying other countries similar examples to use effective factors of them.

• Recognition and Analysis of case study by gathering information in area and using SWOT method.

• With attention to information which extracted from site survey and SWOT table, some principles will be proposed according to obtained intervention framework.

• Design options will be proposed for one of the important spaces of studied area with focus on obtained principles and criteria.
CHAPTER 2: LITERATURE REVIEW

2-1. Introduction

Before the industrial revolution, changes of urban societies were very slow and body of cities was not face with considerable changes. When industrial revolution was happened, urban areas deformed because of economic, social, cultural and new technologies changes. During the time, city changed, developed and grew like other man made phenomena. This development is a dynamic process that during it, both quantity and quality of physical spaces of city change. If process is quick and without plan, it cannot creates a good combination of urban spaces. Thus urban systems face with many problems. (Zangiabadi, 1992, 5) As mentioned before, in this situation an effectively behavior with valuable past heritage is very challenging for many cities, because areas and neighborhoods of a city did not have equal facilities and growth factors during the time. This factor creates different image of cities. Old and ancient areas had reasonable functions and hierarchical in the past but now, they are affected by structural and functional shortages and cannot answer to residents needs. Spatial structure of traditional cities of Iran always has been follow of location, culture and society. Thus city life and its spaces have Continuity based on aesthetics, legibility, function and identity. Acceleration of acceptance of new social and economic relations put a heavy burden on city's historical area and its structure and created new definitions of urban spaces. Their differences in social and cultural context destroyed organic growth and quality of urban life. (Khani, Karimi, Ashoori, 2009, 79).

Thus during the recent decades, historical neighborhoods were faced with structural and functional changes such as disconnection of old spatial structure of neighborhood, deterioration of buildings, inattention to historical neighborhoods and destroying them, leaving neighborhood by native residents and replacement of immigrants, conversion of residential buildings into workshops and storages and also there was wide range of desolate lands. Today cities don't have identity without ancient areas so it is necessary to organize and revitalize this kind of areas such as neighborhoods and markets. Considering that the concept of "improvement of neighborhood structure" is in relation with intervention in area and because issues related to intervention and it's methods are very detailed than classification that are presented in this chapter, so in this research
emphasis is on physical intervention to revitalization of neighborhood's historical identity and improvement of quality of life and activity in neighborhood.

2-2. Definitions

2-2-1. Conceptualizations of Neighborhood

"Various disciplines have formulated theories of neighborhood. Concepts evolved since the end of the 19th century and some claim that neighborhood is an American invention. Conceptualizing neighborhood corresponds historically to significant population growth and increases in the size of urban agglomerations, which precipitated the stratification of urban residents into relatively homogeneous groups at social and spatial levels. It is also related to the modern phenomenon of spatial division between residence and work, which leads to the social status-, rather than work-based, layering of urban societies—to the extent that, today, the term neighborhood is often used for areas whose sole function is residential.

Scholars in the social sciences now commonly consider a “multiplicity” of neighborhood definitions and numerous levels of influence on these definitions. Quoting Suttles, Galster identifies four scales of neighborhood. First is the block face, or the area over which children can play without supervision. Second, the “defended neighborhood” is the smallest area possessing a corporate identity as defined by mutual opposition or contrast to another area. Third, the “community of limited liability,” is a district represented by a local governmental body, in which individuals’ social participation is selective and voluntary. And fourth, at the highest geographical scale, the “expanded community of limited liability,” covers an entire sector of the city. These scales combine neighborhood geography and sociology, and thus help conceptualize different levels of interaction between neighborhood environment and behavior."(Moudon et al, 2006, 100)

Structure and organization of neighborhood is also one of the important keys in definition of neighborhood. Existence and continuity of main axis of the neighborhood with walking ways, network of sub-centers of neighborhood and its form unity is known as a main structure of neighborhood. Also combination of functions and activities for creating space unity, symbols, public spaces, semi-public and semi-private spaces as a
main context of social interactions and relationships is considered as a character of neighborhood. (Habibi, 2003, 32-39).

Lynch is draw visual form of city by five characters that are ways, nodes, landmarks, edges and areas based on people's perception. Also he define neighborhood in bellow sentences: "neighborhood is a medium or large place and includes two dimensions in order to observer entrance feeling. Neighborhood's components are readable, because they have common characters. So we can distinguish its image. These characters continue in whole of neighborhood while end of it."(Lynch, 2004, 91) today the number of residents is the main criterion in definition of neighborhood. In Iran, neighborhood is an area for approximately 700-1250 family's (3500-6250 persons) living and working. in this definition, neighborhood has main elements that have main role in its formation. These elements constitute neighborhood structure in two levels. The first level is some elements such as primary school and mosque. The second level is daily and weekly commercial centers, local parks, and health and sport centers. (Habibi, Masayeli, 2009,39). Generally neighborhood does not have specific definition like some concepts in social science and we can say it has a specific definition in every city and country or even in each neighborhood.
2-2-2. Neighborhood in structure of city

Neighborhoods make main structure of cities. People's daily life is comprehensible in the neighborhood scale significantly and affects that. This effect is formed by the type of infrastructure, equipment and urban services in neighborhood scale, distance of trips, residents and neighbors' social interaction. Urban design and planning decisions occur in neighborhood-scale. For example urban development projects, design of streets, size of blocks, mixed land uses, parks and public spaces could shape the structure of neighborhoods as determinant elements. The level of existing topics in neighborhood scale can be very different from different viewpoints. For some of them putting building blocks in a limited area and for other, size and surface of area is consider. In another viewpoint cultural and social spaces and neighborhood residents who live with each other, are important. (Wheeler, 2004, 181)

Neighborhoods are different like as cities that are different based on size, form, density and other characteristics in global scale, and some parameters such as population, surface and form, can not represent them. But there are some factors such as distinguishable identity, residents' perception, name and physical boundaries that are neighborhood's representative. (Azizi, 2006, 35-46) neighborhoods of each city are cells of that city and each cell has a center that helps to remove daily needs of residents. Physical organization of old cities of Iran was based on a basic principle that is a connection between elements of a complex as follows:

1- Center of city
2- Centers of neighborhoods, by spaces and connected elements
3- Main way
4- Square (Tavassoli, 1987, 55)

2-2-3. Structure of neighborhood

Each neighborhood has a center that is its foundation, people socialize and business there. It is possible mosques, markets, alleys and coffee shops make their centers. This kind of functions has effects on social relations and even on city's areas and buildings. Also it is necessary to have children's play grounds, small shops, services and sports places in small neighborhoods.(Shie,2005,170&171) Open space is propose as a key element in neighborhood that include ways, walking paths and spaces in front of some
places such as schools, that using them is predict in critical times. Educational facilities are located in places that have equal distribution in density and house. (www.edmonton.ca) access network of a neighborhood has effective role in relations and population density. In fact, it is one of the most important elements of its organization. We can say the main way of each neighborhood is its backbone. Other elements are beside it and main way is the most important factor in their relation. Also it is possible to develop the movement of main center of neighborhood to whole of that by making minor centers that are reminiscent of major center. Thus residents have involved themselves in regularity that is created by main structure of neighborhood and sense of belonging to a major and minor centers reinforce. This sense makes social unity and the concept of "our neighborhood". (Habibi, 2003, 32-39).

2-2-4. urban spaces

Urban spaces are a part of open and public spaces of cities that show social life .this means where people are present, is a space that let to all the people have access to it and do activities in this space. There is an opportunity in this space for socialize. (Lynch, 1972, 109) urban space is an organized artifact that is a field for activities and human behaviors. Public function of urban spaces is creating relaxation, entertainment and location for tourism, providing communication and possibility of traffic. (Pakzad, 2006, 81).

Urban space that has different cultural, social, economical or political activities always makes history of city, because most valuable urban spaces belong to the past. So it is not true that urban space is an old element and city does not need to that today. (Tavasoli, 1993, 9). Urban spaces are divided into three categories based on their kind of function:

Private spaces: those parts of urban spaces that are owned by people. These are spaces such as residential houses, yards and private gardens.

Semi public/semi private spaces: parts of urban spaces that are used by special groups because their function and special goal. These are spaces such as residential complexes and their enclosure, stadiums and exhibitions.

Public spaces: spaces that all citizens can be there without control. (Pakzad, 2006, 77). In other words all parts of the city that all people have physical access to them, such as
square, street, park and facades of buildings that define them, are public spaces of city. In another definition, public space includes parts of natural and artificial environment that all people have access to them easily. Also it include streets, squares and other routes that people have right to cross them. (Rafieyan, Seifae, 2005, 35-42)

2-2-5. Quality

Quality is a concept with two sides. This mean it is clear but it is multilateral. Also it is a concept that its definition is not easy. (Golkar, 2001,38-65). Quality is a system of many minor qualities that make a quality of object. (Pakzad, 2002, 103). Quality of an object comes from mental and objective field. according to this theory, qualities that are belong to "mind" are static in human, but qualities that are related to object, can change as a external thing when something change in external world. (Golkar,2001,38-65)

2-2-6. Environmental quality

Environmental quality is a multidimensional concept that has some subscription with concepts such as quality of life, quality of place, perception and citizens' satisfaction. In many cases they are considered as similar meanings. "An environment of high quality conveys a sense of well-being and satisfaction to its population through characteristics that may be physical, social or symbolic." (Lansing and Marans, 1969)

"More specifically, the quality of the urban residential environment is conceived of as possessing a subjective value. This value is determined by the value of the 'urban residential environment' on its underlying attributes, e.g., one's satisfaction with the dwelling, the neighborhood, and the neighbors. The overall subjective value of the urban residential environment, then, is a weighted aggregation of its evaluations on the relevant attributes"( Van poll, 1997, 29-30)

2-2-7. Quality of life

Mitchell opinion about quality of life is a complex of health, physical environment, natural resources, growth and personal development and a sense of security. (Van Kamp et.al, 2003, 5-18). All of these factors make citizen's satisfaction. Also there is a theoretical model of urban environmental quality. According to this model
Environmental quality is represented by the amount of residential satisfaction (level 1 in figure 2-1). Residential satisfaction is thought to depend on the residents' satisfaction with the neighborhood, which is used as a key-indicator of satisfaction with the community (level 2 in figure 2-1). The first two attributes are assumed to depend on the residents' satisfaction with specific dwelling and neighborhood attributes (level 3 in figure 2-1). Neighborhood satisfaction is expected to depend on satisfaction with seven attributes. At the lowest level of the model (level 4), each of these seven features is decomposed into specific sources. (Van poll, 1997, 24-25). These features are in Mitchell's sub-categories.

Figure 2-1. Hierarchical multi-attribute model of urban residential quality (Van poll, 1997, 54)
2-3. Theoretical background

Industrial revolution and rapid population growth caused changes that they needed to new theories in the planning and housing design. Neighborhoods that proposed by Howard entitled garden city in the early twenty century, in fact were design perspectives and social theories of idealistic sociologists in European countries and America. The model that Howard defined was based on image of a small idealized city for workers living that was surrounded by green belt and was able to incorporate positive features of city and village. (freeston,1989,1-22). Le Corbusier residential units (1953-1960) and Clarence Perry's neighborhood unit (1927) are two design solutions in the first half of the twentieth century. (Lang, 1994,52). Perry suggested "neighborhood unit" as social and physical Environment for urban areas development. (Perry,1939). "For Perry the physical arrangement of the elementary school, small parks and play grounds and local shops was the basic of his neighborhood idea. Each neighborhood was to be a 'unit' of the city."(Patricios, 2001, 21-32) In the past decades, few of researchers have been looking for a framework for urban design that is not relied on "neighborhood unit" as a general pattern design of residential complexes. (Herbert, 1963, 199). Some of the theorists believed urban facilities are permanent elements of city form and they are main urban framework that designed for adaptation and change. Also Alison and Peter Smithson presented a similar urban design theory. Both theories renounce the Inflexibility of "neighborhood unit". (Herbert, 1963, 199). Following these theories, in third generation of England new towns, designer's emphasis changed from rapid changes in the early 60s to social equality and residential complexes. In this case, designers believed that there is not certain measurement for urban sub-divided. (Banerjee & Baer, 1984, 174). In recent decades, based on different approaches, solutions were invented based on cultural and economical conditions in different countries. They have been partly influenced by the views of designers and somewhat affected by the housing market conditions. Designers are faced with vacant land in new areas of city and they are faced with rehabilitation projects in available areas. In both cases, efforts are to improvement social and physical conditions of residential environment. Residential complex programmed is a pattern that was popular in 60s in US to control housing planning. (Barnett, 1974, 37-40) aim of this
pattern is achieving to a harmonious geometric combination near the street and considering more public green space for more compact residential complexes. (Christoforidis, 1996, 3-17). Newer design patterns such as "new traditional residential neighborhoods" that are designed with multi-environments and same as small cities that rely on themselves, and "pedestrian complexes" that are designed based on regional strategy in continuity with around complexes, attempted to correct disadvantages of residential planned complexes. (Einifar, 2007, 39-50). In 1993 the Congress of New Urbanism holds and its charter was published, thus the new urbanism was introduced in the US in 90s.(Carmona,2003,10). New urbanism criticized living in the suburbs because of the lack of a fundamental concept of traditional small cities, such as pedestrian scale, centrality and identifiable boundaries, different functions, various population, defined public open spaces and accessibility for public. Duany and Zyberk introduce neighborhoods, districts and corridors as main components of cities based on traditional design. In their definition, neighborhoods are sub-divisions of city that take place balanced mix of activities in themselves. While urban districts, provide specific activities. Corridors are connection between neighborhoods and districts. Also they provide their accesses. According to this definition a distinguished neighborhood that is designed in green space is called an "urban village". (Einifar, 2007, 39-50). With regard to the above definitions, Duany and Zyberk define following principles for an ideal neighborhood:

- Each neighborhood has specific center and edge.
- The optimal size of neighborhood is a quarter mile from the center to its edge.
- Neighborhood is a combination of various activities such as living space, shopping, working, education and worship.
- Neighborhood makes spaces and internal access network in a fine combination.
- Neighborhood gives priority to public spaces and location of urban public buildings.

With regard to the above principles, the purpose of this design model is combining the features of traditional cities such as human scale by street design, housing diversity and integration of available functions for pedestrian in neighborhood center and public spaces. This suggestion included social and environmental recommendations in recent decades such as reducing the use of car, increasing the use of public transportation,
Combining social classes and respect to the natural environment and historical features of place. (Fisher, 1993, 14-36). Generally, new urbanism presented principles. These principles created methods that were physical. These principles include:

- Walk ability
- Connectivity
- Mixed use & diversity
- Mixed housing
- Quality architecture & urban design
- Quality of life
- Sustainability
- Increased density
- Traditional neighborhood structure

Beside this model, other models such as residential pedestrian-oriented complexes and similar design patterns were noted. Residential pedestrian-oriented complexes or complexes that are made in urban transportation stations as a substitute for planned complexes are Simple aggregation of residential units, commercial retail spaces and offices in a quarter mile of the station of urban transportation. (Kelbaugh, 1989, 4) A mix of residential units in a short distance from urban transportation station connects residential pedestrian complexes to residential, commercial, educational areas and also to other residential complexes. Four main elements of pedestrian complexes that Calthrope suggests are high housing with low density, main multifunctional street, transportation based on light railroad and commercial center of region. This pattern instead of use the dispersal of residential houses and cars, have been suggested the neighborhood with focusing on the area of transportation stations and regional strategies. Designers of residential pedestrian-oriented complexes believe regional strategies can be effective on development of new urban areas. In addition compact structure and legibility of these centers can revitalize the sense of belonging to place and local society again. The purpose of this design plan is protection of open spaces and reducing the car traffic without increasing neighborhoods density. According to this theory, residential pedestrian-oriented complexes can be a pattern for new developments and reconstruction of empty areas of cities. This pattern can be complementary strategy
for reconstruction of available areas and historical cities. (Calthrope, 1993, 17) in design of residential pedestrian-oriented complexes, social goals, such as creating links between different social and age groups were considered in addition to achieving physical goals. In the late of 90s the pattern of smart growth was introduced with focus on integrated planning and creating job opportunities in local scale. Smart growth is a pattern to deal with dispersion and disorganization of cities, protection of identity and improvement of life quality in urban areas. Access to appropriate urban transportation networks, focusing on the living in local society, Protection of natural resources, using the population and building density, Protection of cultural and historical areas, observance of design standards and focus on street quality as life space, are features of this pattern. (Barnstein, 2007, 3-4)

In recent approaches of design, researchers and designers paid more attention to the diversity of human needs despite the similarity with general previous models. This attention is partly influenced by change of position than environmental issues (especially in related fields such as environmental psychology) and partly influenced by people's expectations and aspirations and their request for living in residential areas with better quality. thus, although many principles of patterns and their solutions in first half of the twentieth century are valid and can be used still in design of residential complexes. Cultural and local features, historical background and social conditions are important factors in the diagnosis and differentiation of complexes in different cities and countries. These features with other effective factors to improvement of quality of life determine criteria for design and construction of residential complexes today. (Einifar, 2007, 39-50)

2-4. Neighborhood characteristics

Characteristics of a Great Neighborhood include:

- Has a variety of functional attributes that contribute to a resident's day-to-day living (i.e. residential, commercial, or mixed-uses).
- Accommodates multi-modal transportation (i.e. pedestrians, bicyclists, and drivers).
- Has design and architectural features that are visually interesting.
- Encourages human contact and social activities.
• Promotes community involvement and maintains a secure environment.
• Promotes sustainability and responds to climatic demands.
• Has a memorable character.(www.planning.org)

Living in Iran's neighborhood has features that Falamaki describe some of them as follows:
• Each of residential neighborhoods has self-help and limited independence.
• There is a kind of limited social life and independent of the market (and its economical, political and social activities) in the city and residential neighborhoods.
• Residential neighborhoods have a specific residential hijab against market space (as a public space for all the citizens).
• Social behavior of residents is special in neighborhood because their families traditional features.
• The symbiosis of families that are resident in a neighborhood is affected of historical events and surprise events in area. (Falamaki,1996,)

Some of the main characteristics of the neighborhood are as follows:
• Neighborhood has historical background.
• Neighborhood has public and open spaces for manifestation of cultural creativity.
• Neighborhood has its own special symbols and facilities.
• Public oversight is possible in neighborhood.
• Neighborhood has a community that is legislation advocate.
• There is a sense of ownership in residents.
• Neighborhood has a political and social community such as local council
• There is social belonging in neighborhood.
• There is cohesion in neighborhoods.
• Residents have power for solving neighborhood problems.
• There is peace, security and freedom in neighborhood. (www.aayeene.blogfa.com)
2.5. Neighborhood identity

"The creation of place or neighborhood identities is a complex and dynamic socio-cultural process. The identity of a locality represents the interplay of social and physical factors, which can be externally and internally defined – simultaneously imposed and self-generated. Such identities have a major bearing on how particular neighborhoods are viewed as places to live and to stay." (Robertson et al., 2008, 1)

"Questions of identity and belonging have long been core to the sociological agenda. Having a sense of knowing where you are from can be a key part of understanding your own identity and your relationship with others. Asserting that you are ‘from’ a particular nation, region, town or neighborhood can be crucial to how you locate yourself both socially and culturally. It has long been acknowledged that different housing neighborhoods acquire different social identities. Those who live in particular localities can also develop attachments to places, which can inform, to a greater or lesser extent, understandings of themselves, others and how they are viewed by others. Thus the development and maintenance of a particular social identity for a specific neighborhood can be the result of a complex weaving of internal and external interactions and forces" (Robertson et al., 2008, 2)

Lynch describes elements that create city identity in his famous book entitled image of city as follows: paths, edges, districts, nodes and landmarks. This means physical and local structure of cities is one of the main aspects of cities identity. In other words, the physical context can be divided into two groups: first group is ancient elements (historical structure) and the second group is new elements that everyone can divides into public spaces, open and functional spaces, residential, commercial and service spaces. In this among, urban views and spaces are the first and basic elements based on their physical characteristics and functional role. Identity is the image of visual, physical and architectural characteristics. In other words they are environmental values that there were in residential areas in the past time. Organized full and empty spaces, readable space and visual qualities of past residential areas are values that stayed in mind of people and the complex of they, creates residential neighborhood identity. Thus its survival and sustainability is necessary.
2-6. Effective factors in improvement of neighborhood structure

Neighborhood definitions and characteristics, structure and definitions in related neighborhood identity are one of the important characteristics of urban neighborhoods that are strong social relationships between residents. But the reality is that in recent years that cities are faced with social problems, there is more need to revitalization of neighborhood relationships. So, it is very important to understand the affective factors in rehabilitation of social relationships. As was discussed in chapter one, Although during the past years many reasons such as immigration and cultural issues caused social disconnections in structure of neighborhood, but one of the most important affective factors on this disconnection is physical issues. An overview of structure of cities and old neighborhoods in Iran shows that spatial continuity had an important role in definition of neighborhood and its structure. Also it helps to define the public spaces that improve the people's presence, liveliness space and finally social relations. Revitalization of above items relates to revitalization of neighborhood identity and as it was mentioned, this identity is complex of visual, physical and architectural features that continue dominantly in image of city. it is physical aspect that determines 'what image of neighborhood can stay in people's mind?' behaviors and activities that are current in space can be connections between elements of spatial structure of neighborhood. The first step is locating of neighborhood structure elements such that be able to provide a discussion space between the mass, space and pedestrian. the next step is attention to structure of neighborhood network that can guide pedestrians from center to around and transfer the movement from node to axis. This action causes different images of neighborhood structure. Some scholars have identified principles for combination of urban design elements, that their application can be effective in shaping and recreating of neighborhood structure. (Habibi, 2003, 32-39)

2-6-1. Land marks

"As we find our way during everyday tasks, our spatial navigation is guided by an interaction between perceived environmental information and memories of where things are and how we got to them in the past. Different categories of learning processes have been proposed to support memorial navigation, with differential dependencies on different neural systems. A distinction is made between place learning and response
learning or equivalently between local and taxon navigation. Place or local refers to knowledge of a location defined in terms of distance and direction to the configuration of surrounding environmental information, which can consist of landmarks and/or the geometry of the environment. The location of the self or of an object can be resolved flexibly, e.g. as when starting from a new position, and relies heavily on the hippocampal system. By contrast, response or taxon refers to behavior which is directly guided by sensory information (as when the target location is visible, or at the end of a marked path) or which inflexibly re-instantiates a previous sequence of movements, and relies on the striatal system." (Bullens & et.al, 2010, 170-180) "The church, intersections, gas station, apple tree, stop sign, and the ‘end of the road’ probably stand out because they are reference points. Such distinctive environmental features functioning as reference points are landmarks. When associated to navigational actions (such as turn right), landmarks ease navigation by indicating when and where these actions should be taken. Because of their navigational function, "In recent years, visual perspectives of vehicle drivers, road traffic and pedestrians, and the role of landmarks in way finding and navigation studies are the most important topics appearing as central concerns of urban studies related with visual experience of cities. The former group contains studies about aesthetic experience of road traffic, from the point of view of people both inside motor vehicles as drivers and passengers, and outside vehicles as pedestrian and cyclists. The latter group has a number of studies investigating the nature of landmark from various points of view such as the knowledge creating extensive spatial ability in way finding. Spatial knowledge is said to be necessary to build a complete mental representation of an environment and visual landmarks are the most remembered. This means that the salience of landmark in some sense (visually, auditory, olfactory, or semantic) is accepted as the most important element for the visual image of the city and the navigation of its inhabitants. Klippel and Winter define the structural salience of landmarks along routes in two steps; formalization of salience of objects, and conceptualization of their way-finding actions. It is true for formalization process but not enough as the salience or saliency denotes relatively distinct, prominent or obvious features compared to other features. The complexity of spatial layout in an urban landscape causes the most general requirement of landmark that it must be in contrast with the environment in order to have perceptual distinction. Despite the vast
number of studies, few attempts have been made to define the visibility of a landmark by sequential view process while approaching it." (Kalin & Yilmaz, 2012, 241-271) Creating urban symbols and landmarks in neighborhood, stop places, main center, sub-centers and squares or along pedestrian and car axis causes an interaction between them and by this way moves space organizer forces in neighborhood. In Iranian and Islamic architecture, using some special symbols in buildings with different function such as menare of mosques that was made the consistent structure is example of applying this method. (Habibi, 2003, 32-39)

![Menare of mosque as a landmark](www.google.ca)

**2-6-2. Public spaces**

"Public spaces are open to all, regardless of ethnic origin, age or gender, and as such they represent a democratic forum for citizens and society. When properly designed and cared for, they bring communities together, provide meeting places and foster social ties of a kind that have been disappearing in many urban areas. These spaces shape the cultural identity of an area, are part of its unique character and provide a sense of place for local communities." (Woolley & Rose, 12) "The open spaces near our homes give us a valuable place to socialize with our neighbors, whether chatting over the garden fence or meeting in the local park. Gardens and allotments, for example, can provide an especially good community focus and an opportunity for small, personal interactions: in
the West Midlands, allotments have been shown to encourage cross-community and cross-cultural ties. On a larger scale, community gardens and city farms bring people together from different ages and cultures, and thus help to create a real sense of neighborhood. Once again, however, quality counts: the better the design of the space in question, the better the quality of the social experience. In this regard, it has been found that big, bland spaces on housing estates fail to offer the same opportunities for social cohesion as more personal spaces. One of the fundamental functions of public space is that it allows us to move around – on foot, by bicycle, by car, motorbike or public transport. A key objective of public-space design and management is therefore to reconcile the needs of these often conflicting modes of transport. Well-designed streets and public spaces encourage walking and cycling, and have the power to make our environment a safer one by reducing vehicle speeds and use. ‘Home Zones’ have begun to demonstrate the benefits of redesigning streets for shared use by residents and pedestrians, not just cars. "(Woolley & Rose, 14) another benefit of high-quality public space is its potential as a venue for social events. Well managed festivals and other events can have a very positive effect on the urban environment, drawing the community together and bringing financial, social and environmental benefits. They can, in particular, reintroduce the kind of civil society that has been lost in too many of our urban areas. One good example is the annual New Year’s Eve ‘First Night’ festival in Boston, US, which has established itself as a key feature in the city’s calendar; business people who were initially sceptical about its potential now see the festival as a major boost for their companies, and the city’s artistic community also benefits. To encourage events like these, along with their spin-off benefits, cities need to plan the physical layout of their public spaces with festivals and other social activities in mind." (Woolley & Rose 13 )
"Urban spaces in historical areas are based on the hierarchical movement from macro to micro. This hierarchy is a movement from public space to private space (Figure 2-2). The needs of the people and function of these spaces determine their order and compositions. In this hierarchical system, the most important urban spaces are the covered semi-private spaces between houses and the central square of the neighborhood (neighborhood center). The central space of that is the most excellent manifestation of urban design in a period of time by the people who used it. Public space can be defined as a space that allows people to access and it with activities that happen there. Totally, the role of public space appears to be helping to establish the distinctive identity of the place and create the conditions in which the neighborhood population can develop their relationships." (Farkisch & et.al, 2011, 24)
"Community space is one of the main urban spaces where has flow the civil life on neighborhoods. In the past community space were places for social cohesion and urban spaces where social institutions rooted in the lives of urbanization. Furthermore neighborhood center as collective space is a space for social meetings and staying in all hours of the day. Hence it can recreate the social relationships by its dimension that effect to dwelling like physical features, place dimensions, and meaning. However, neighborhood center has more depth and social meaning because of simultaneous access to several spaces, and creates the space experience by continuous motion. Public spaces of the city are spaces of sociability, where social encounter can and does take place. For example, the formation of distinctive neighborhoods, with a centrally located public space aimed at facilitating social interaction and integration, is one way of giving a distinctive flavor to the spaces of sociability." (Farkisch & et.al, 2011, 25) there was a neighborhood center in every one neighborhoods of large and medium historical cities of Iran. These centers had two shapes. The first one was a path that was a little wider than other paths in social and commercial spaces. The second one was a small square. These squares often were at intersection of several ways or near the main way of neighborhood and there were some stores for supply of essential daily and weekly goods to residents. Also mosque, bath, water storage and some other public spaces of neighborhood were built near this square. In other words public spaces were combination of static and dynamic spaces.
2-6-3. Static spaces

Static spaces have a main role in spatial and social structure of neighborhoods. Static space can be a square or small local square that induce stop feeling by function or special design. Stopping in space, improves people’s presence and causes social relations. This space can be a good place for celebrations and cultural or traditional exhibitions. Also static space must be an attractive space and create a desirable feeling for residents. Creating strong function for static spaces is possible by making buildings around them Thus attention to static and dynamism feature of confined spaces is important in local and urban accesses design. Locating some elements (special buildings) near the path or street and square gives credit of place to spaces. (Tavasoli, 1993, 50) also it is possible to create static space by urban furniture such as bench, flooring and fountain. Because they are elements that make attractive spaces and invite people to use them.

![Sample of static spaces](https://www.google.ca)

2-6-4. surrounded urban spaces

As was discussed attractive urban spaces have important role in creating tend to use the space and surrounded space is one of the factors that is effective in creating this attraction. It is not possible to achieve an attractive urban space without surrounded spaces. This principle is common in old cities in most parts of the world. Just there is difference in size, shape, access and surrounding body. Elements that surround spaces are urban, neighborhood and houses elements. Surrounded spaces are in related with integrity of surrounding body of space. This means buildings facades should have
effective role in surrounding the spaces. Several distances between the buildings, more
differences between buildings' facades decrease the quality of surrounded spaces. A
large urban space creates a sense of great in people, because human is very small in this
space. The current tendency in the West of world is construction of small residential
groups after experiences of creating high raise apartments. There is a sense of intimacy
and security in small residential groups and realm of residential space has meaning.
According to this thinking, human is most important element of space and space should
finds human scale for his usage. (Tavasoli, 1993, 27) the elements of surrounding body
are selected due to the location and designer idea. These elements have a wide range.
Some of them are covered parts of a passageway, body of space, a row of trees and
different levels.

![Image of urban spaces]

Figure 2-6. Sample of surrounded urban spaces, created by buildings, trees and different levels
(www.google.ca)

2-6-5. Mixed uses

"Developers and planners have suggested that mixing land uses can reduce automobile
dependency by making more goods and services available within walking, biking, and
short driving distances. This view has resulted in a neotraditional planning movement
that promotes neighborhoods designed with traditional characteristics including a mix
of land uses. Over the past 40 years, a notable change in land use has been the growth of
residentially oriented suburban neighborhoods located some distance from employment
and service centers. Linked with this growth are increasing levels of traffic congestion,
pollution, and general disenchancement with suburban life. These negative impacts have
focused on the potential transportation benefits of traditionally oriented neighborhoods
(i.e., neotraditional neighborhoods) characterized by more diverse land use development patterns. Developers and planners have suggested that mixing land uses can reduce the level of dependency on the automobile by making more goods and services available within walking, biking, and short driving distances."(McCormack et al., 25) "Land use mix refers to the synergy created when banks, restaurants, shops, offices, housing, and other uses locate close to one another, allowing for decreased travel distances between origins and destinations. In some instances, mixed land use may even promote walking or cycling as a substitute for auto travel. From a perspective of residential location, Banerjee and Baer (1984) identify land uses that people value in close proximity to their home. The most desirable uses include a drug store, food market, gas station, post office, specialty food, and bank. Additional benefits of mixed land uses include serving as a means to (1) anchor transit stations and transit service, (2) reduce parking demand (and impervious surface) because spaces can be shared among uses and throughout times of day, and (3) spread the demand for external trips more evenly throughout the day, reducing levels of peak congestion."(Krizek, 273) diversity of land use is another feature of attractive urban spaces. Diversity of uses is most important kind of variety because a place that has diversity of uses includes different kinds of buildings with different forms. A place such as that attracts various humans to various purposes in different times. (Bentli & et.al, 2003, 59) thus different kinds of activities near the main accesses of neighborhood, increases social activities in neighborhood and brings people into public spaces. (Habibi, 2003, 32-39) "Support for existing and future artistic, cultural, and historic institutions is critical to fostering community identity and achieving long-term goals for quality of life. Creative, innovative, and artistic uses should be encouraged in addition to preservation and adaptive reuse of historic structures to celebrate the authentic and unique assets of each district. Equitable development ensures that each district will support a diverse population of existing residents and new residents within a wide range of racial, ethnic, age, and income levels."(http://detroitworksproject.com)
2-6-6. Spatial hierarchy

"Urban in the Islamic period are include the mosque, Madreseh (religious school), bazaar, Maidan (square), neighborhood, and specially neighborhood center which will remain important part of culture and social life of Iranian urban areas. The influence of Islamic values also is deniable on social life of the people and development of traditional Iranian cities. Public open spaces are the most fascinating parts of historic cities. Open spaces in historic areas are based on the hierarchical movement from the central part of the city, the main streets, alleys which lead to neighborhood (Mahalle) centers, secondary alleys, ‘Hashti’ (the traditional entry halls to several houses) of the houses, entry halls and the court yards. This hierarchy is a movement from public space to private space. The central space of the neighborhood is the most excellent manifestation of urban design in a period of time by the people who used it." (Farkisch & et.al, 2011, 23) "Public open spaces are the most fascinating parts of historic cities. Open spaces in historic areas are based on the hierarchical movement from the central part of the city, the main streets, alleys which lead to neighborhood (Mahalle) centers, secondary alleys, ‘Hashti’ (the traditional entry halls to several houses) of the houses, entry halls and the court yards. This hierarchy is a movement from public space to private space. The needs of the people and function of these spaces determine their order and compositions. Main access and streets are wider and alleys, which terminate at houses, are very narrow. In this hierarchical system, the most important urban spaces are the covered semi-private spaces between groups of houses called 'Hashti', and the central square of the neighborhood. The central space of the neighborhood is the most excellent manifestation of urban design in a period of time by the people who used it."(Farkisch & et.al,2011, 24). Today one of the main problems is suddenly relationship between residents from their private space to public space. when residents come out of their home see themselves in public commute. In such a situation familiar and relations disappears. (Tavasoli, 1993, 70)
This is the same damage that causes disconnection in neighborhood social life. Hanss Puel Bardt believes there is a relative relation between the public and private spaces with urban character of the house. Whatever this relation be stronger, environment is more urban. Creating an order that its scale changes step by step from public spaces to
private spaces and includes physical divisions, needs to spatial organization of urban space and it's recreating. This hierarchy is in width and characteristics of paths, the composition and availability to public services, spaces scales and the amount of using the space. Thus the mind of participant in neighborhood space, every moment finds himself in situation that related to previous and next situations. In this structure, perception of public space and main organization of neighborhood obtain from contrasts and interactions not from conflicts. If this hierarchy occurs in paths, main and minor centers (squares and stop places), mass and space, in functions and their composition, it is possible to achieve integrated and organized generality. (Habibi, 2003, 32-39)

2-6-7. Architecture

"Design is a systematic process of organization and interpretation. The desire for order within our environment is a basic human characteristic. This process towards order can be traced in almost every cultural history wherein legend and myth detail the creation of our world, gods and civilization from the origins of chaos. The assembly of order continues to dominate environmental design through the design of civilizations, civic planning, environmental controls and land management. Order can be found within smaller designations such as the grouping of like-minded persons into guilds, civic organization and clubs. Architectural design is a component of the desire for order in the manner by which we choose to control our living environment; providing space for desired activities and establishing a place within the world itself."(Dietrich, 11)" The tools and devices used in the process of architectural design can be defined as either design elements or design principles. Design elements are those which can be defined as specific "parts" of a design solution. Design principles are those items which influence, direct or resolve the overall composition of the design elements.

Architectural design elements include:

• Materials
• Color
• Line
• Shape
• Mass
• Space
• Texture
Architectural design principles include:
• Balance
• Connection
• Contrast
• Emphasis
• Form
• Grouping
• Imagery
• Meaning
• Symbolism
• Pattern
• Placement/Proximity
• Proportion
• Rhythm
• Scale
• Unity
• Variety

As was noted earlier, these elements and principles work together to provide a final solution according to their respective influences. The impact of the final solution will depend as much on the individual elements and materials as it will on the manner by which the architect applies specific principles to the solution. Architectural design as a creative artistic act sometimes requires defiance of established or accepted principles in order to achieve the desired result. These elements and principles noted are guidelines which, when used properly, may provide a satisfying result but they are neither flawless nor complete. The skill of the architect is found in the manner by which they apply aspects of design combined with artistic sensibility and vision. Application without interpretation or the personal sense of design is building, not architecture."(Dietrich, 12-13)
2-6-8. Permeability

"Connectivity (or permeability) refers to the directness of links and the density of connections in a transport network. A highly permeable network has many short links, numerous intersections, and minimal dead-ends. As connectivity increases, travel distances decrease and route options increase, allowing more direct travel between destinations, creating a more accessible and resilient transportation system." (TDM Encyclopedia, 2012)

"Connectivity affects the degree to which transportation networks such as streets, walking and cycling paths, connect people to their destinations (including intermediate destinations such as public transport services). Good connectivity provides easy access to key destinations for pedestrians. Excellent connectivity actively seeks to discourage car use by making local trips easier and more pleasant by foot than by car. Transportation activity (walking or cycling) is positively associated with number of destinations and public transport and perceived access to bike lanes near home." In addition, the presence of well-maintained footpaths is associated with walking for recreation and for transport.

The type and density of intersections in the network (not just those for cars) has a significant impact on how people move around, whether by foot, bike, public transport or car. A less permeable network has few intersections making it difficult to reach a destination in a reasonably direct route, and using a number of different routes between point A to point B. Destinations in areas with a well connected path network are easier to reach, than those in areas with a less connected path network." (http://www.healthyplaces.org.au). Because of public spaces permeability depends on number of way that are potentially for passing from a point to another point, so these ways must be clear. Thus the visual permeability is important. Both aspects of physical and visual permeability depend on how public spaces divide the environment? (Bentli, 2003, 16).attention to space capability is consider in using both private and public aspect in neighborhood because of neighborhood permeability with attention to its residential aspect and with considering the privacy aspects of residential space.
2-6-9. Legibility

"It is plausible to consider the city using two distinct lenses, gazing alternatively at form and content. For a city, form is essentially spatial consisting of the disposition of objects across the landscape, both natural and manmade. Content concerns the various sacred and profane activities of the city and is essentially semantic, conveying specific social, cultural and economic meanings. Traditionally, cities were concrete spatial manifestations of cosmic or civic order. Although this is clearest in ideal cities like Sforzinda, it is also easy to read in almost every pre-modern city. The wall was a break between the known and the unknown, the tallest building was the temple, and the largest space was the palace. In all these cases, the semantic and the spatial were united in a clear and stable duality." (Wessel et.al, 2009, 182)

Legibility is important in two levels: physical form and activities patterns. It is possible that places be legible in one of these levels. But to take full advantage of the potential of a place, awareness of physical form and activities patterns should complete each other. Remarkable elements of environment physical aspects play a major role in shaping the content of people's common mental image. Lynch believes these elements are paths, edges, nodes, landmarks and districts. (Bentli, 2003, 113&119)
2-6-10. Improvement of pedestrian paths

A pedestrian path is an off-road foot path that connects places of activity. It is usually constructed of a material different than concrete, such as asphalt, stone dust, compacted gravel, mulch or bark. When an impermanent surface is used, consideration should be given to the need for and appropriateness of accessibility. A pedestrian path may be used to connect neighborhoods together where a vehicular thoroughfare is either impractical or unwarranted such as in a very low-density area and where steep terrain makes a sidewalk difficult to construct. Pedestrian paths may be used as nature trails such as along a greenway. With an urban scale of development, pedestrian paths may be used to augment a sidewalk system. When access to or through natural features is important. When augmenting a sidewalk system. Pedestrian paths should connect directly with the sidewalk in places that support access through the development. Pedestrian paths through wetlands or on very steep slopes may have to be raised as a boardwalk. Multi use path is an off-road access way for pedestrians, bicyclists, and persons in wheelchairs. Such paths are generally paved and fairly wide to accommodate the different users of the paths at the same time. Multi-use path should be used where high volume non-vehicular traffic is expected. Multi-use paths may be used to provide off-road connections between high activity areas such as a shopping center and a university center. Multi-use paths may also be used if different modes of transport are anticipated in a neighborhood. It may be necessary to separate groups or provide
directional information on a multi-use path through use of striping." (County of Albemarle, 2001, 49)

"Pedestrian facilities have significant roles in the transport network for trips made entirely by walking and the first or last links in a trip made by other types of transport. Inadequate provision of pedestrian networks and crossing facilities can have a large impact on overall ‘connectivity’ and therefore ‘walk ability’ of a route. Walk ability is how friendly the environment is and the ease in which pedestrians can travel through this space. It includes factors such as connectivity, legibility, safety and pedestrian Level of Service. Pedestrian networks should be planned to:

- Minimize walking distances between land uses
- Provide a clear route to entrances of large developments (rather than surrounding car park areas)
- Avoid conflicts with vehicular movements where possible
- Provide appropriate pedestrian crossing facilities on busy roads
- Provide paths on most streets (with the exception of lightly trafficked local streets), preferably on both sides." (Planning and designing for pedestrians: guidelines, 2012, 64)

Also "Safety and amenity features of paths and streets that encourage walking includes:

- Wide paths without obstructions and free from areas where people can hide
- Designing buildings which front onto streets to provide passive surveillance, avoiding car parking or low activity areas immediately adjacent to footpaths
- Convenient crossing points with curb ramps designed for wheelchairs and prams and for people with visual disability
- Short crossing distances using curb extensions and tight radii at intersections which also slow down turning vehicles (provided radii are sufficient for service vehicle turning movements)
- Street lighting in accordance with required standards
- Traffic calming to reduce vehicle numbers and speeds
- Shade and weather protection with trees and building canopies
- Interesting and attractive street furniture including seating and rest area
• If underpasses / grade separated crossings must be used, designing these close to pedestrian desirelines and with consideration of crime prevention principals.

Development guidelines such as Designing out Crime Planning Guidelines, Reducing Crime and Anti-Social behaviour in Pedestrian Access Ways Planning Guidelines and the Procedure for the Closure of Pedestrian Access Ways provide guidance on good design of pedestrian networks. Local Government may also have planning requirements applicable to the design of attractive pedestrian networks." (Planning and designing for pedestrians: guidelines, 2012, 65) thus priority of pedestrian, improves social activities and social security because it encourages the presence of people in different spaces of neighborhood.

2-6-11. Network of neighborhood centers

We can develop interaction movements from center of neighborhood to whole of that, by creating a main center and a network of minor centers that are reminder of main center in neighborhood. Thus the residents of neighborhood find themselves in an organization that is created by neighborhood structure and the sense of belonging to a main center and minor centers reinforces. This feeling creates social integration and a concept entitled 'our neighborhood' and neighborhood boundary is defined by its structure. Revitalization or creation a network of related spaces causes reorganization of spatial organization of neighborhood structure and its networking and each center will be comprehensible in relation to other centers and main center. In this method, neighborhood centers and sub-centers are in relation with main and minor paths, so they cause stop and movement. Creating a network of integrated spaces provide the context of concepts such as privacy, hierarchy, scale, complexity, simplicity, centralization and decentralization in neighborhood. (Habibi, 2003, 32-39) structure of many ancient cities of Iran such as Kashan, Naen and Yazd that is based on relation between city center and neighborhood centers through major paths, is an emphasis on importance and efficiency of network of centers in organization of city and neighborhoods. That was common in cities such as Venice, Rome, Florence and Paris. Creating centers, squares and relation between they by movement paths, has been given importance to structure of city in above cities.
2-6-12. Rhythm

One method of overcoming on spatial irregularities is discipline imposition by creating rhythmic form and using them in parts of neighborhood structure. "There are certain forces; that called rhythms, which exist in the urban environment. They are rhythms because they are both physically and perceptually dynamic. These rhythms shape the city, and give character to the different neighborhoods in the city. They help organize the sites in those neighborhoods; they influence the designs of the buildings on those sites, the rooms within the buildings and even the buildings smallest details. Rhythms are found at every scale of design. They exist regardless of language or articulation of the Architecture. They are independent of style or ornament. They are clues for the architect to discover and act upon. They can be anything from actual physical elements, to fleeting emotional ones. They allow projects to be tied intimately to the environment around them. They give the city its fabric. These rhythms are in a constant and dynamic evolution, yet they help produce and enhance something seemingly static - the sense of place, because they are already an intimate part of the place. Architects have the opportunity to capture these rhythms, to manipulate them, and to use them in the creation of places which energize the user's experience. In fact, architects have the responsibility to do so in exchange for the privilege of impacting the development of the city."(Merrill D. St, 1999, 3) Composition of huge dome of mosque and smaller domes of religious places and other elements of architecture with an appropriate scale in Iranian cities is a clear example of rhythmic organization and integration of structural elements. (Habibi, 2003, 32-39)
The causes of creating above factors have been described briefly in table 2-1.

<table>
<thead>
<tr>
<th>Factor of neighborhood structure improvement</th>
<th>Causes of creating the factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Landmarks</td>
<td>• Contrast and heterogeneity</td>
</tr>
</tbody>
</table>
| Public spaces                                 | • Design of children play ground in neighborhood  
|                                               | • Neighborhood center         |
| Static spaces                                 | • Creating square or a small local square  
|                                               | • Using urban furniture such as bench |
| Surrounded urban spaces                       | • Continuity of buildings      
|                                               | • Observance of human scale    |
| Mixed uses                                    | • Diversity of uses            
|                                               | • Diversity of space           
|                                               | • Diversity of forms           
|                                               | • Diversity of users           |
| Spatial hierarchy                             | • Width and features of street 
|                                               | • Proportionality of space     
|                                               | • Access to public services    
|                                               | • The amount of use the space  |
| Architectural                                 | • Creating congruence and contrast through following factors:  
|                                               |   Sky line, distance of buildings, proportionality of facade details such as doors and windows, building's form, material, pattern of shadow, decorative elements, architectural style, landscape and scale of buildings |
| Permeability                                  | • Clear local pathways        
|                                               | • Enhance of visual permeability in neighborhood  
|                                               | • Reduced public permeability by separate paths, for cars and pedestrians and using the hierarchy in organization of space |
| Legibility                                    | • Legibility and clarity of physical form  
|                                               | • Legibility and clarity of activity patterns |
| Improvement of pedestrian path                | • Integration of car and pedestrian movement with attention to pedestrian's safety  
|                                               | • Integration of pedestrian path with soft and natural spaces such as parks and gardens |
| A network of neighborhood centers             | • Connection between main center and network of minor centers |
| Rhythm                                        | • Harmonic combination of elements or volumes |

Table 2-1. Causes of creating effective factors on improvement of neighborhood structure (reference: author)
2-7. Components of historical neighborhood improvement

2-7-1. Regeneration

"The urban regeneration is viewed as necessary in all involved cities as a viable solution for many neglected, low income, architecturally and socially disadvantaged areas. The rapid growth of the cities, with dozens of suburbs, many dating back to the 19th and early 20th centuries, and most planned and built in the past 50 years, has often resulted in isolation of historic city centers, older residential city parts, and in abandonment of industrial and port areas. More recently, the urban sprawl has aggravated such situation bypassing built-up areas within the city limits and consuming new land around the traditional cities. The rapidly changing times have imposed new requirements for a successful regeneration. Cities that lagged in understanding and adapting to that face physical and social problems that are becoming difficult to resolve. Therefore, innovative solutions are the most valuable in the process of urban regeneration. Lack of innovative planning leads to a large desertion of inhabitants and decline of the environment." (Split, 2003, 3)

"Urban regeneration is an integrated vision for community development in low-income urban areas with the focus on and approach to tackling the existing problems encountered in difficult circumstances. Urban regeneration can be defined as a conscious, systematized and planned action concerning a certain section or the totality of a town. Objectives of urban regeneration can be achieved by mobilizing and evaluating endogenous potentialities emanating from the characteristics of the area and from human resources. Economic revitalization must be one of prerequisites of urban regeneration. It could take the forms of functional restructuring or functional diversification or functional regeneration, i.e. keeping the existing uses but operating them more efficiently or profitably. Urban regeneration is a comprehensive and integrated intervention that leads to the solution of urban problems and that seeks to bring about a lasting improvement in the economic, physical, social and environmental conditions of the affected area. It contributes to the sustainable development using once developed areas in a more efficient way. "(Split, 2003, 4)
2-7-2. Functional restructuring and diversification

Functional restructuring is displacement of existing functions by using empty spaces and making new activities. Limited restructuring that offers new uses to coordinate and support the economic foundation of neighborhood is called functional diversification. In both parts it is possible to use areas historic characteristics as their privilege. (Khademi, 2000, 72-75)

2-7-3. Physical revitalization

Case studies often were looking for functional protection. This kind of protection tries to resist against market forces and other economic transformations and finally will be fruitless. Thus maintenance of physical character and flexibility of functional character of the neighborhood are most important. Only attention to functional characteristics fails the efforts to required investment to preserve and improvement of physical neighborhood and decrease quality or even causes to loss of historic buildings. Also other damages can be achieved by extreme protection of physical or functional characteristics. In process of revitalization of urban historical neighborhoods, physical interventions are often the first step. Usually, the first attempt to revitalize the historical neighborhood contains physical improvement of buildings or public spaces or both of them. Improvement of environment appearance is necessary for people attraction and new uses attraction. Most of the studies show, people are discomfort and feel fear in destroyed places and places which signs of neglect can be seen in them. Thus the physical revitalization is considered as improvement of public areas that public organs are responsible for its investment. Also rehabilitation of buildings by revitalization and with existing land use or new land use that private sector is its investor. (Khademi, 2000, 72-75)

2-7-4. Social revitalization

Each historical neighborhood that has successful social revitalization is a liveliness and dynamic place. It is an attractive place also. Streets are full of people and crimes decreased in them. Today, urban design is in related with creating sense of place and also making place. People's presence turns space into place and a live, dynamic and regular part of city. The consensus that is emerging is, all fields of urban design need to
take attention from appearance aspect and the human experiences of place should be considered. Thus, desirable urban neighborhoods are good examples of urban design. In this context public territory as a physical and social structure is important and needs to have life by people in addition to a defined spatial physic. Urban spaces should be live by people's presence and this need to planning. Mac Cormac says about osmotic and effective character of streets: this is when the inside activities of buildings are able to continue in street. Also he says some uses do not have good relation with street people but some of them create a friendly relation. Sense of human's presence and liveliness in urban spaces depends on these relations. Mac Cormac proposes a kind of uses hierarchy that are effective in giving life to public hierarchy. This does not mean that some uses are unnecessary and do not have a place in urban area, but it means their locating in front of street and public part is not necessary. Car parking is located in the lowest level or in fact, in the end of McCormack hierarchy and there is not any importance for being that beside the pedestrians and also street markets are located in the highest level that create interaction between people and retailers and also between streets and kiosks. There is a diverse range of different land uses between these two levels that can be classified them based on the amount of their relation with street: car parking, storage, Large-scale industries, apartment blocks, supermarkets, shops, offices and small-scale housing, restaurants and street shops. (Khademi, 2000, 72-75)

2-7-5.Economic revitalization

"Creating infrastructure for non-motorized transportation and lowering automobile speeds by changing road conditions can improve economic conditions for both business owners and residents. Street design that is inclusive of all modes of transportation, where appropriate, not only improves conditions for existing businesses, but also is a proven method for revitalizing an area and attracting new development Complete streets also boost the economy by increasing property values, including residential properties, as generally homeowners are willing to pay more to live in walk able communities" (www.completestreets.org), physical revitalization can creates an attractive and well preserved public space In the short term that gives to people a positive image of place but in the long term economic revitalization is essential and finally private section has benefit so it can pay the cost of public spaces maintenance.
2-8. Intervention methods in old urban areas

"In recent decades, urban centers with historical and cultural significance are being seen, besides being spaces that maintain the memory, identity and values of a society, as cultural assets with high potential to give leverage to and assist local development. Their preservation, then, is not just a question of protecting the heritage; it is also an aspect to be taken into account in urban planning. In this context, some terms have appeared, such as reconstruction, renewal, revitalization and other "re's", the objective of which is to make possible the social, economic and cultural resurrection of these spaces, guided by coordinated action between public authorities, private enterprise and civil society." (Costa A, 2006, 75)

2-8-1. Urban Reconstruction

"The subject of urban reconstruction is primarily the historical nucleus of the city, as is most attractive urban unit, that is, cultural, business, economic and political center. The issue of urban reconstruction of the central city area is extremely important, because it comprises reviving, activating and improving this area with the application of different carefully selected methods."(Dinić et al, 2008, 127-138)

Reconstruction follows complete transformation of history and making new conditions in area or removing past buildings and making new constructions. Context of urban interventions can be urban areas, complexes and buildings or both of them. Reconstruction does not have Loyalty to the past and destruction is possible where it is necessary. (Sharan Engineering, 2005, 1-4) thus the following cycle is most important part of reconstruction.

![Figure 2-11. Cycle of reconstruction process](Habibi,2001)
2-8-2. Urban Renewal (Renovation)

"The Concise Oxford Dictionary definition of renewal is to ‘regenerate, make new again, restore, and recover’. Renewal focuses on the restoration of vigor, strength and activity within a community and encompasses the dual potential of redevelopment. It has scope for the demolishing of and the rebuilding of communities and/or the physical environment. Couch (1990:1) defines urban renewal as ‘…the physical change, or change in the use or intensity of use of land and buildings, that is the inevitable outcome of the action of economic and social forces upon urban areas. The goals of urban renewal have the potential, depending on the theoretical strands of influence, to encompass the goals of social justice, citizenship and communitarianism. The most pervasive goals across most urban renewal programs are more practical and relate to addressing social problems through lowering crime"(Walker et.al, 2003, 7) in renovation the loyalty to the past values is allowed and its activities are as bellow:

![Diagram of renewal process]

Figure 2-12. Cycle of renewal process (Habibi,2001)

2-8-3. Urban Revitalization (Improvement)

Urban revitalization is improving the conditions of urban areas by using physical and non physical (social, economical, geographic and cultural) measures. Integrated revitalization is the most important kind of revitalization that contains both physical and non physical measures." it emphasizes the development of lively city canters as an
attractive living-, working-, investigation- and recreational location for all actors, demographic groups and generations. (http://www.qualist.eu)

"A sustainable revitalization connects the protection of economical and architectural-cultural heritage with the requirement of a changing society and economy. The project activities make an important contribution to establish a balanced equilibrium between opposite restrictions on the sustainable applications of the economical and architectural-cultural heritage and its preservation. Therefore, historic buildings and city areas receive sustainable and future-oriented functions, the architectural-cultural heritage is gently adapted, renewed and enhanced to its physical shape and environmental balance to changing economic, social, ecological and demographical conditions." (http://www.qualist.eu)

"An integrated revitalization emphasized the development of lively small Town centers as central point of living and working for all actors, population groups and generations. The sustainable revitalization will be constraint the protecting of cultural heritage with the requirements of a rapidly-changing society"(http://www.qualist.eu)

In this kind of intervention loyalty to the past and conservation of any things that belong to the previous periods is most important principle. Activities of revitalization process are as bellow:

![Cycle of revitalization process](Figure 2-13. Cycle of revitalization process (Habibi, 2001))

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2-9. Intervention methods in historical neighborhoods

"Improvements through physical urban design intervention contribute partially to the transactional relationship between pedestrians and their built environment. Existing social and economic activities, urban infrastructure and individual preferences have much to do with attracting people to a particular urban location. Once in that location, the physical and spatial elements will probably have some impact on how people spend their time to appreciate and experience the place. Successful historic urban places have the advantages over recent urban developed areas for they possess an abundance of vestiges that can provide information to the curious minds of the visitors. The historic urban physical form can be an important factor in generating pedestrian movements but requires extensive investigation to determine what constitutes their effectiveness."
(Zubir & Sulaiman, 2004, 4) Intervention may be justified if it increases understanding of the past, reveals or reinforces particular heritage values of a place, or is necessary to sustain those values for present and future generations, so long as any resulting harm is decisively outweighed by the benefits. (Lockhart, 2008, 22)

2-9-1. Conservation

"Definition of conservation includes the objective of sustaining heritage values. In managing significant places, ‘to preserve’, even accepting its established legal definition of ‘to do no harm’ is only one aspect of what is needed to sustain heritage values. The concept of conservation area designation, with its requirement ‘to preserve or enhance’, also recognizes the potential for beneficial change to significant places, to reveal and reinforce value. ‘To sustain’ embraces both preservation and enhancement to the extent that the values of a place allow. Considered change offers the potential to enhance and add value to places, as well as generating the need to protect their established heritage values. It is the means by which each generation aspires to enrich the historic environment."(Lockhart, 2008, 15) "Conservation is the process of managing change to a significant place in its setting in ways that will best sustain its heritage values, while recognizing opportunities to reveal or reinforce those values for present and future generations. Conservation is achieved by all concerned with a significant place sharing an understanding of its significance, and using that understanding to:
• judge how its heritage values are vulnerable to change
• take the actions and impose the constraints necessary to sustain, reveal and reinforce those values
• mediate between conservation options, if action to sustain one heritage value could conflict with action to sustain another
• ensure that the place retains its authenticity – those attributes and elements which most truthfully reflect and embody the heritage values attached to it." (Lockhart, 2008, 22)

2-9-2. Cellular approach

The second approach is cellular approach. It means we can decompose each complicated thing. So it is possible to know its main existence by accuracy in components behavior. Cellular approach is in fact a product of the industrial revolution. In this period urban restoration became common to empowering, so that urban spaces came as a heritage of city that must be active in order to social and economic conditions improvement. In such circumstances, an attitude overcomes on city that often makes transformations in old and damaged historical areas of cities, regularly and continuously. As a result in cellular approach, historical monuments of old and valuable buildings of city are considered to economic rehabilitation. Also the main motivation of their conservation and restoration is renewal of economic structure. (Habibi et al, 2007, 86)

2-9-3. Organcist approach

Organcist approach emphasizes on new concepts such as hierarchy, and dynamics of biological phenomena. In this approach, sustainable revitalization of historical areas finds a significant position by determining their role in urban spatial structure of city. organcist approach removes a closed system from these areas by explaining the role of historical areas in spatial structure of a city. This approach has the following features:

• Maintenance of buildings physical bodies with using all the facilities of modern construction technology and providing necessary acceptance technical criteria for living and working inside them.
• To make equal condition of living in city. This means removing the shapes exhaustion and deficiencies of health and urban communication in urban historical areas and to equal these with new areas.

• Integration of old centers and urban areas in environment. This is a comprehensive rehabilitation of old and damaged parts of area or city with focus on positive aspects of social dynamic. (Falamaki, 1996, 82)

2-10. Conclusion and theoretical approach of thesis

Structural and functional changes and rupture of historical neighborhood's old spatial organization and also importance of these ancient areas existence in today cities, consider the necessity of their organization and revitalization. Physical and social aspects are most important concepts that play main role in definition of neighborhood. In fact neighborhood has a physical structure that is context of interactions and social relations. The structure of neighborhood helps to Residents' perceptions of space and makes active social life. Center of neighborhood is main foundation of Iranian historical neighborhoods that contain mosque, shopping centers, alleys and Coffee houses and people socialized there. Also open spaces are considering as a key element in neighborhood and contain paths, walk ways, parks and play grounds. Main path is backbone of neighborhood's structure. Open spaces can locate in main path as several minor centers. So legibility image is created as visual or in mind of residents and increases the sense of belonging to the neighborhood. In fact physical fabric and spatial structure of the city make one of the most important aspects of its identity and this is environmental values that were in past residential neighborhoods. A set of these values makes identity of residential neighborhoods and improves quality of residential environment. Identification of some factors such as Permeability, legibility, existence of public spaces, landmarks, static spaces, surrounded spaces, various land uses, network of centers, unity, attention to spatial hierarchy and architectural, improvement of main way and main pedestrian way are necessary for survival the identity and improvement of environments' quality. Above components are used as the theoretical framework in this research. These components are considered as renewal, revitalization and reconstruction methods of interventions in areas that have Social and physical deterioration and in historical areas with similar deterioration, renewal and revitalization
are important methods of intervention. As it was discussed physical, social and economic revitalization are different aspects of historical neighborhood's revitalization. Thus attention to all aspects of physical, social, functional and economic is necessary in order to revitalization and improvement of historical neighborhoods' structure. In this thesis revitalization method with Organeist approach based on above theoretical framework make theoretical approach of this research.
CHAPTER 3: SIMILAR EXAMPLES OF NEIGHBORHOOD REHABILITATION IN OTHER COUNTRIES

3-1. Introduction

Old and historical urban areas and their organizing is a noticeable issue in all countries always. Each country selects different approaches in facing with these areas. Surveying and results of different approaches and interventions in old and historic areas, also their influences are good guides to identifying effective approaches and their applying method in urban areas. Also using these experiences and understanding their problems could be an effective step to avoid of repeating costly mistakes. However it should be noted that there is not any fixed approach or standard policy for organizing the old and destroyed areas and the related approaches should be chosen based on local characteristics. In this chapter some examples of other countries have been reviewed to identifying their approaches in old historical areas.

3-2. Mississippi’s Gulf Coast

"Mississippi’s Gulf Coast has a rich architectural heritage that has created a collection of neighborhoods remarkable for their diversity and unique regional character. While the architecture of the houses varies from town to town, a common architectural language was shared by the region's traditional builders which have resulted in the unique character and quality of neighborhood streets, public spaces and parks, and downtown streets. As we walk along these streets today, or remember doing so in places that are now gone, it is the graceful porches, the ornament on top of a porch column, the grandeur of tall narrow windows, and the gracefulness of a cornice detail that tell us where we are – and who we are. The devastation wrought by hurricanes in the region destroyed many of the buildings which created these streets, neighborhoods, and towns. With the urgent need to rebuild, it is essential to find the most efficient and cost effective means for providing housing and making it possible to resume activities. The Mississippi Renewal Forum has developed concepts for rebuilding towns and cities in new ways but as traditional urban environments. That work addresses the larger scale issues of new urban patterns, building relationships and town character."(http://www.mississippirenewal.com) In revitalization of Mississippi’s Gulf
Coast three sections has been proposed that are Neighborhood Patterns, Architectural Patterns, and Landscape Patterns which all of them are important to rehabilitation of an area. Neighborhood Patterns are more important and in related with the subject of thesis. That is according to below:

- Settlement Character

"Neighborhoods and buildings have very different character traits that create the distinct sense of place. The Smart Code has defined a series of zones that include the most rural – T1 to T2 – to typical neighborhoods in towns and villages – T3 to T4 – and urban centers that have more of a mix of uses with a variety of building sizes and densities. These zones include traditional Main streets and areas with special uses – T5 and SD."
(http://www.mississippirenewal.com)

![Figure 3-1. Settlement Character](http://www.mississippirenewal.com)

- Streets & Blocks

"The physical structure of a neighborhood is defined by its network of public streets, (occasionally with alleys), residential development blocks and park spaces. The street pattern can vary from a small-scale grid of streets focused on a park green to curving streets to a series of cul-de-sacs depending on the neighborhood’s era of development."
(http://www.mississippirenewal.com)
• Building Setbacks

"Each residential development block (yellow) is lotted into individual house lots with a typical front yard zone (light green) which is the “public face” of the house. These lots can vary in size and can accommodate single or multi-family lots. The “building setback” is the distance from the front property line to the face of the house. Neighborhoods usually have a common setback for the houses that varies depending on the era of the neighborhood." (http://www.mississippirenewal.com)

• Houses on Lots

"Houses are built along a relatively consistent front yard setback line. Setbacks vary slightly to provide visual relief and to allow for porches, existing trees and other landscape elements to remain. First floors and porches tend to sit two to three feet above finished grade. Ancillary structures, such as garages and sheds, are attached to the house or are located at the rear of the lot." (http://www.mississippirenewal.com)
Figure 3-4. Houses on lots (http://www.mississippirenewal.com)

- Public Street Landscape

"Public street landscape, such as grass verges (lawns) and street trees provide both a visual edge as well as a buffer between the street and the front lawn. In the older neighborhoods, the trees have grown quite large and beautiful creating a canopy of green as one walks down the street." (http://www.mississippirenewal.com)

Figure 3-5. Public street landscape (http://www.mississippirenewal.com)
• Private Front Yard Landscape

"The individual personality of the homeowner is displayed through the varying treatments that front and back yards receive. Landscaping patterns can range from the formal to the informal, and brick edging, brick walks and well trimmed hedges are as common as naturalistic gardens of low groundcover, medium height shrubs and indigenous ornamental trees." (http://www.mississippi.renewal.com)

![Figure 3-6. Private front yard landscape](http://www.mississippi.renewal.com)

• The Individual House

"The last component of a neighborhood is the individual house. The house provides the greatest opportunity for variety through the use of architectural styles, massing forms, color palette and the varied possibilities of landscaping selections." (http://www.mississippi.renewal.com)
3-3. Franklin Square, Baltimore, Maryland, USA

"Baltimore City is located 39 miles north of the U.S. capital, Washington, D.C., and 97 miles south of Philadelphia. In the heart of the Mid-Atlantic region, the port city of Baltimore is a dynamic urban center fueled by a diverse economy, internationally renowned universities and medical centers, and an extraordinary collection of historic and cultural resources. Industries such as health care and life sciences, international finance and banking, hospitality and entertainment, and maritime commerce attract a highly educated and productive workforce."(http://www.choosemaryland.org)

"Franklin square is a national historic district in Baltimore, Maryland, United States. It is a 19th century row house neighborhood developed along a strict grid street pattern. A one square block, two and a half acre public park, Franklin Square, is a focal point for the area and the most elaborate row housing surrounds the square. The district contains approximately 1,300 buildings of which approximately 1,250 contribute to the significance of the historic district."(http://en.wikipedia.org) Urban renewal plan of Franklin Square that is prepared by department of housing and community development of Baltimore in 1978 has been selected as a one good plan of revitalization of historic area in the early years of creating urban planning, because it contains many aspects of revitalization such as architectural, economic, landscape and etc. A small part of that is as follows:
3-3-1. Project Description

"Objectives and Reasons for the Various Provisions of this Plan

a. To achieve a strong residential neighborhood, including supporting commercial and public facilities in the Franklin Square Area.

b. To provide, through acquisition of properties for clearance and redevelopment and for rehabilitation, a substantial number of housing units for low- and moderate income families.

c. To remove substandard buildings and to eliminate blighting influences especially as they affect residential uses.

d. To keep to a minimum the involuntary displacement of individuals and families by providing, wherever possible, for residential rehabilitation.

e. To bring about a general physical improvement in the area by coordinated private and public improvements.
f. To encourage home ownership through the use of all applicable federal, state, and local programs.

g. To achieve safe and sanitary living conditions.

**Types of Proposed Renewal Actions**
a. Rehabilitation;
b. Clearance and Redevelopment; and
c. Provision of public facilities and public improvements.

**3-3-2. Land use plan**
1. Permitted Uses Only the use categories shown on the Land Use Plan, shall be permitted within the Project Area. The use categories are Residential, Office-Residential, Community Business, Community Commercial, Public, and Industrial. Accessory uses including landscaping, off-street parking, and off-street loading will be permitted. In addition, certain uses, for the most part mixed uses, will be permitted to continue subject to the provisions governing non-conforming and non-complying uses set forth below.

a. Residential In the area designated as Residential on the Land Use Plan

b. Office-Residential
In the area designated as Office-Residential on the Land Use Plan Map, the Following uses shall be permitted: residential and physician offices/medical center. The physician offices / medical center.

c. Community Business
In the area designated as Community Business on the Land use Plan, those uses permitted under the B-2 category of the Zoning Ordinance of Baltimore City.

d. Community Commercial
In the area designated as Community Commercial on the Land Use Plan those uses permitted under the B-3 category of the Zoning Ordinance of Baltimore City.
e. Public
In the area designated as Public on the Land Use Plan Map, uses shall be limited to parks, playgrounds, plazas, and malls; active and passive recreation; schools and related educational facilities; neighborhood centers; public offices; libraries; fire houses; parking; other public facilities.

f. Industrial
In the area designated as Industrial on the Land Use Plan Map, the following uses shall be permitted:
light manufacturing and related activities of a relatively nuisance-free nature, compatible with adjacent residential or commercial uses; warehousing and storage activities; the expansion of existing businesses in the area for additional building space.

g. Non-Conforming
A non-conforming use is any lawfully existing use of a building or other structure, or of land which does not conform to the applicable use regulations of the district in which it is located according to Article 30 of the Baltimore City Code (1976 Edition, as amended), entitled “Zoning.”

h. Non-Complying
A non-complying structure is any lawfully existing structure which does not comply with the bulk regulations of the zoning district in which it is located. In addition, a non-complying use - when such term is used herein - is any lawfully existing use of a building or other structure, or of land, which does not comply with the land use regulations of this Plan. These non-complying uses shall be permitted to continue for an indefinite period of time, except that:
(1) Any non-complying land use which is discontinued for a period exceeding twelve months shall not be re-established;
(2) No change in the permanent physical members of a structure, such as bearing walls, columns, beams or girders, or no substantial change in the roof or in the exterior walls shall be made I or to a building or structure except those required by law or except to make the building and use thereof conform to the regulations of this Plan; and

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(3) No non-complying land use shall be changed to any other non-complying land use.

2. Regulations, Controls and Restrictions

a. Provisions Applicable to All Land and Property to be acquired

The following regulations, controls, and restrictions will be implemented where applicable by covenants, or other provisions in the agreements for land disposition and instruments of conveyance executed pursuant thereto:

(1) General Provisions

(a) No buildings, structure, or parking area shall be constructed over an easement within the Project Area without the prior consent of the Commissioner of the Department of Housing and Community Development and the Director of the Department of Public Works.

(b) No materials shall be stored or permitted to remain outside buildings. No waste material, refuse, or garbage shall be permitted to remain outside buildings except as permitted by the Baltimore City regulations regarding containers for garbage; the areas for such containers shall be properly screened.

(c) No sign shall extend above the roof line or parapet wall of the building to which it is attached; no sign shall project more than 12 inches from the building to which it is attached. No free-standing signs shall be permitted. No animated or pulsating signs shall be permitted. The total area of exterior signs for each building shall not exceed in gross area one foot times the street frontage, in feet, of the building; except that signs not exceeding six square feet in area erected for the purpose of directing motorists to the entrance or exit points of off-street parking areas shall be permitted when attached to a fence, screening wall or building wall and shall not be included in the total area calculated for exterior signs.

(d) All land not covered by structures, paved parking, loading, or related service areas, paved areas for pedestrian circulation or decorative surface treatment shall be provided with landscape treatment. Landscape treatment encompasses the planting of any, all, or
a combination of the following: trees, shrubs, ground cover, grass, flowers. The amount of landscape treatment should be determined by the nature of the development and should serve to improve the utility of the site, soften and relieve the effects of structure and pavement, and provide visual harmony. All screening and landscaping shall be maintained in to good condition.

(e) The setback areas abutting street rights-of-way, with the exception of driveways, sidewalks and other walkways, shall be used exclusively for the planting and growing of trees, shrubs, lawn and other ground covering materials. These areas shall not be used for nor considered in computing the parking and/or loading space requirements.

(f) Exterior ventilation equipment or any mechanical equipment placed outside of a building, including on the roof, shall be effectively screened.

(2) Off-Street Parking Requirements - Parking spaces shall be provided on all lots for development as established in the Zoning Ordinance of Baltimore City, or in such lesser amount as may be authorized by the Board of Municipal and Zoning Appeals as a Special Exception or Variance. In addition to these requirements, off-street parking areas shall be visually screened from public streets and adjacent properties.

b. Provisions Applicable to All Land and Property Not to be acquired

(1) General Provisions the provisions of Section B.1. (Permitted Uses) above shall apply to all properties not to be acquired within the Project Area. The provisions of Section B.2.a. shall apply as appropriate to properties not currently proposed to be acquired by this Plan, if the owners thereof acquired adjacent project land made available by the Department of Housing and Community Development under the provisions of this Plan.

(2) New Construction, Exterior Rehabilitation, and Change in Use

All plans for new construction (including parking lots), exterior rehabilitation or change in use on any property not to be acquired under the provisions of this Plan shall be submitted to the Department of Housing and Community Development for review. Only upon finding that the proposed plans are consistent with the objectives of the Urban
Renewal Plan, shall the Commissioner of the Department of Housing and Community Development authorize the processing of the plans for issuance of a building permit. The provisions of this section are in addition to and not in lieu of all other applicable laws and ordinances relating to new construction.

(3) Demolition
All applications for demolition permits shall be submitted to the department of Housing and Community Development for review and approval. Upon finding that the proposed demolition is consistent with the objectives of the Urban Renewal Plan, the Commissioner of the Department of Housing and Community Development shall authorize the issuance of the necessary permit. If the Commissioner finds that the proposal is inconsistent with the objectives of the Urban Renewal Plan and therefore denies the issuance of the permit, he shall, within 90 days of such denial, seek approval of the Board of Estimates to acquire for an on behalf of the Mayor and City Council of Baltimore the property, in whole or in part, on which said demolition was to have occurred by purchase, lease, condemnation, gift or other legal means for the renovation, rehabilitation and disposition thereof. In the event that the Board of Estimates does not authorize the acquisition, the Commissioner shall, without delay, issue the demolition permit.

3-3-3. Techniques used to achieve plan objectives

1. Acquisition
Properties designated for acquisition on the Property Acquisition Map, (including parts thereof or interests therein), will be acquired either for clearance and redevelopment, for rehabilitation, or for public improvements.

a. Conditions Under Which Properties Not Designation for Acquisition May be Acquired

(1) Non-Salvable and Non-Compliance with Provisions

It may be necessary to acquire by purchase or by condemnation for urban renewal purposes the fee simple interest or any lesser interest in and to such of the remaining
properties or portions thereof in the Franklin Square Project not specifically designated for acquisition on the Property Acquisition Map, as may be deemed necessary and proper by the Commissioner of the Department of Housing and Community Development to effect the proper implementation of the project. This may include:

(a) Any property in the Project Area containing a non-salvable structure, i.e., a structure which in the opinion of the Commissioner of the Department of Housing and Community Development cannot be economically rehabilitated.

(b) Any property the owner of which is unable or unwilling to comply or conform to the codes and ordinances of Baltimore City and the Property Rehabilitation Standards of this Plan within 12 months from the date of written notice of the required improvements, the Department of Housing and Community Development, after due consideration that the property owner has failed to achieve substantial conformity with the codes and ordinances of Baltimore City and the Property Rehabilitation Standards of this Plan, may acquire such property pursuant to the Eminent Domain Law of this State as if the property has originally been planned for acquisition after 90 days written notice to the owner. The Department of Housing and Community Development reserves the right to acquire any such non-complying property for a period of two (2) years from the date of said written 90 days notice by the Department of Housing and Community Development.

(2) Rehabilitation by the Department of Housing and Community Development or others

It may be necessary to acquire by purchase or condemnation the fee simple interest, or any lesser interest in and to such of the remaining properties not specifically designated for acquisition on the Property Acquisition Map in order to carry out rehabilitation by the Department of Housing and Community Development or for resale. These properties are being acquired because:

(a) It is necessary to make residential structures available for use for low and moderate-income families; or
(b) Rehabilitation on a structure-by-structure basis is infeasible, and assemblage of a group of properties is required to carry out the objectives set forth in this Plan; or

(c) Rehabilitation of individual, scattered properties is necessary in order to remove blighting influences from otherwise sound residential blocks.

b. Actions to be followed by the Department of Housing and Community Development upon Acquisition of Properties

Upon the acquisition of properties, the Department of Housing and Community Development will either:

(1) Demolish the structure or structures thereon and dispose of the land for redevelopment for uses in accordance with this Plan; or

(2) Sell or lease property subject to rehabilitation in conformance with the codes and ordinances of Baltimore City; or

3) Rehabilitate the property in conformance with the codes and ordinances of Baltimore City and the Property Rehabilitation Standards in this Plan, and dispose of property in accordance with applicable regulations. If sale cannot be consummated by the time rehabilitation is accomplished, property may be rented pending continuing sale efforts.

2. Rehabilitation

a. Property Rehabilitation Standards

Property rehabilitation shall comply with the codes and ordinances of the City of Baltimore. Cleaning of masonry façades by means of sandblasting shall not be permitted, except where sandblasting is determined by the Commissioner of the Department of Housing and Community Development to be the only feasible means of surface cleaning of masonry and where, in his opinion, it will not cause damage to historic building materials. Over and above the codes and ordinances of Baltimore City, the provisions shall apply to all nonresidential properties, whether occupied or vacant, within the Project Area other than those to be acquired for clearance. The
Commissioner shall not approve any permits which are not consistent with these standards.

b. Design Review and Approval

Designs for all building improvements, modifications, repair, and rehabilitation or painting of the exterior of existing buildings, their yards or show windows, and for all signs, shall be submitted to and approved by the Department of Housing and Community Development before proceeding with the work.

3. Relocation

a. The Department of Housing and Community Development assures that before individuals or families are displaced from their dwelling units due to the requirements of this Plan, standard housing within the displaces’ means shall be provided. Residents living within the Project Area, if displaced through the requirements of this Plan, shall be given a priority by the Department of Housing and Community Development to any housing within the Project Area over which the Department has direct control.

b. The Department of Housing and Community Development assures that before firms or individual businesses are displaced from their present location of operation due to the requirements of this Plan, standard commercial structures within the displaces’ financial means, in or near the Project Area, shall be identified. Businesses displaced because of the requirements of this Plan shall be given favorable consideration, but not necessarily priority, by the Department of Housing and Community Development in the review of commercial and industrial redevelopment proposals.

4. Review of Development

a. Land to be acquired and disposed of

The Department of Housing and Community Development specifically reserves the right to review and approve the Redeveloper’s plans and specifications for development or rehabilitation with respect to their conformance with the provisions of the Renewal Plan and in order to achieve harmonious development of the Project Area.
The department also reserves the right to refuse to approve any such drawings, plans or specifications that are not suitable or desirable, in its opinion, for aesthetic or functional reasons, and, in so passing upon such drawings, plans and specifications, it shall have the right to take into consideration, but shall not be limited to, the suitability of the site plan, architectural treatment, building plans, facades, materials and color, construction details, access, parking, loading, landscaping, identification, signs, exterior lighting, refuse collection details, streets, sidewalks, and the harmony of the plans with the surroundings. (http://www.baltimorecity.gov)

3-4. Vecchia, Bari, Puglia, Italy

"The target area within the Urban Program in Bari was the historic centre of the town, called ‘Bari Vecchia’. This area, on the one hand, presents a ‘deprived profile’ in terms of unemployment, low level of education, criminality and delinquency, rundown environment. In addition, due mainly to micro-criminality, the people who didn’t live in the area for a long period of time have been frightened to accede to it. So, this area was actually precluded to all citizens but the inhabitants. On the other hand, it presents many resources in terms of position (it is located close to the business district of the town) and historic and symbolic values for the town as a whole. Bari Vecchia has been in the local Municipality agenda for many years, but there are never been concrete regeneration interventions in order to invert the area declining process, which begun in the early XIX century after the enlargement of the old town beyond its ancient walls. The Municipality attention for Bari Vecchia had been increasing during the last Eighties-early Nineties and new initiatives had crowded the area when the Urban Program was set up in 1994. In particular, some restoration projects of historic buildings were funded through EU Structural Funds during the 1994-1999 programming period. Moreover, due to many factors and particularly to the progressive acknowledgement of the historic centre environmental resources within the town, in the same years gentrification processes interested the fringe of this area. In this context, and in the framework of the above mentioned physical approach mainly assumed by Urban in Italy, the program set up for Bari aimed mainly to improve the quality of physical space, focusing also on the economic aspects of regeneration. It is worth mentioning that in the program setting up there was an attempt to consider the social aspects of regeneration, but in practice they
were reduced to vocational training courses and building restoration for public service delivery. This was probably due mainly to the misunderstanding – in the first phases of the policy process – of the meaning of the Program. In parallel, the political part understated the potential of the program in terms of symbolic impact on the citizenship. The program was set up by a consultant agency, while in order to implement it an Urban Office was created ex novo, consisting only of the co-ordinator and two employees. The Office was located in Bari Vecchia. The consultant agency helped the Municipality Office in implementing the program too. All the measures and actions were conceived by the Urban Office and its consultants, the involvement of local people being confined to informal relationships. There were competitive calls for proposal to fund each action. The program's contents and aims were ‘communicate’ to the citizens during public events. The program had a very deep impact on the town and beyond it, we can say in the entire region. This was mainly due to its high ‘visibility’. As a consequence, the Urban Initiative in the old part of Bari seems to have become a sort of model on intervention in historic centers for a number of other towns in the region. So, was Urban in Bari a success? Of course, it depends on the point of view. Certainly, it was a success in terms of public administration efficiency, which is absolutely unusual for a Southern Italy Municipality. It was a success for the citizens living outside the area because the improvements let them accede to a part of the town that was precluded for many years. In fact, some squares and streets were rehabilitated, and new restaurants, pub, cafés opened. But this process interested mainly the area fringe, making it accessible to all the citizens, most thanks to the increase of gentrification processes. Within this picture it is difficult to say that the program improved the inhabitants living conditions. Moreover, what we have defined the “excessively successful actions”, in particular those addressed to the economic revitalisation of the area, implied many undesirable effects in terms of contrasts between inhabitants and new comers, between those worried about the alterations introduced into such a valuable and fragile environment, and those enthusiastic of change. To conclude, the processes in Bari let us arise a crucial question concerning the possibility, when dealing with regeneration processes, to stress the improvements of an area as a whole or the improvements of living conditions of inhabitants. It is not easy to answer this question due to position of Bari in an Objective 1 region, where it is particularly difficult to decide if it is more important to increase the
town competitiveness or to tackle social exclusion. "(Barbanente & Tedesco, 2002, 1-16)

Figure 3-9. Location of Bari Vecchia (https://maps.google.ca)

3-4-1. The objectives

"The objectives to be reached could be summed up in three action categories: Objective A: Urban and environmental rehabilitation, pursued through a series of measures to remake and modernize the networks and services of a number of squares and streets of particular historic worth, with special regard to connecting the abovementioned spaces with the remaining part of the city, and through a series of restoration measures on buildings of great historic value.

Objective B: Economic and productive revitalization, pursued through an action supporting the opening up of new productive activities, located in the old town (Citta Vecchia), and the modernizing of the existing ones.

Objective C: Combating of social decline by means of upgrading receptive structures for the carrying the out of social activities and services, rehabilitating buildings in public ownership and promoting a series of measures on the territory aimed at
improving the usability and the safety of a number of roads and squares in the old town by means of providing adequate public lighting.

Vocational training courses have also been organized, intended not only for territorial operators engaged in the field of the social services, but also directly for commercial and catering operators, new entrepreneurs and craftsmen, etc.

Although apparently the objectives fixed by URBAN seem separate from each other, all the measures are on the contrary closely connected together, and possess a common denominator: the environmental and social rehabilitation of the Citta Vecchia. Think for example of the incentives for economic and productive revitalization, accompanied by a series of training courses for commercial and catering operators, or other formative measures for the creation of new enterprises, handicap workshops and/or cooperatives. with these coordinated joint actions, an unemployed young person, for example intending to start up an activity on his own, has had the chance to attend training courses and, at the same time, to obtain non-repayable grants for the opening of the commercial firm or handicap workshop. The revitalization of the Citta Vecchia will assuredly obtain the hoped- for success because the URBAN project has foreseen numerous measures (objective 1) aimed at making use of public spaces (buildings, squares, streets, etc) to concentrate and intensify the moments of social aggregation and thus make the renaissance of economic life possible in a pleasant, safe context. Also the functional integration of the Citta Vecchia with the neighboring Murattiano district is starting to become a reality: for instance, the "Passeggiata" to the Citta Vecchia starts from Corso Cavour and from Corso Vittorio Emanuele, which are the two commercial thoroughfares par excellence. It will therefore be possible to assess the results of the project only if the measures in progress are analyzed transversally and if significant points of contact can be found between the various actions carried out."(www.planum.bedita.net)
Figure 3-10. A public space and facade of some buildings of Bari Vecchia (www.thinkpuglia.com)

Figure 3-11. Allays of Bari Vecchia
(www.thinkpuglia.com)

Figure 3-12. Some commercial allays of Bari Vecchia
(www.google.com)
3-5. Quartieri spagnoli and Rione Sanità, Naples, Italy

The historic centre of Naples is a rare example of an architectural ensemble which illustrates significant layers of the city history related to the Mediterranean basin. The orthogonal grid of the ancient Greek foundation of Neapolis is still discernible and has indeed continued to provide the basic form for the present day urban fabric of the historic centre of Naples. Naples is one of the most important ports in Italy and in the Mediterranean basin in terms of goods and passengers traffic and it’s going to become the most important one for cruise traffic. Revenue obtained from tourism and cultural activities is an essential part of the economy’s growth. The most prominent architectural forms in Naples are from the Medieval, Renaissance and Baroque periods. The Greek-Roman road network was preserved until now in the old town centre and the stratification of the following ages enlarged its patrimony of many major monuments. Its street pattern, its wealth of historic buildings and parks, the continuation of many of its urban functions, its location in the Bay of Naples and the continuity of its historical stratification illustrate the many significant influences that came together to create this important Mediterranean city. For this reason the old town centre of Naples was included in the “World Heritage List” of UNESCO in 1995.

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1. Information of this section has been extracted from Heritage as opportunity local action plan, city of Naples, April 2011
3-5-1. The Urban Program and the redevelopment of two deprived areas of the historic centre of Naples

It was the first instance of an integrated program in Naples, as there is a tradition here of essentially town-planning initiatives, interpreted as the re-structuring of a block. Until Urban, there had never been any programs aiming to promote social and economic activities. Social problems were in some ways privileged by giving the task of implementing the plan to the councilor for Social Policy. The adhesion of the municipality at the Urban program confirms that the resolution of the social problems were one of the first point of the Mayor's political agenda, directly elected in 1993 for the first time by the inhabitants.

3-5-1-1. Objectives

The objective of the Urban Program was to act as a catalyst for the widespread and uncoordinated initiatives of urban and social regeneration that were underway in the city and through adequate support unifying them in terms of time, place and action. In particular, the intentions were:
- To address through an integrated approach the problems of a limited area in the city by combining the promotion of economic activity with improvement of the environment;
- To define pilot intervention plans aimed at a lasting improvement in the quality of life.

The target area covers the “Quartieri spagnoli” (15,000 inhabitants) and the “Rione Sanità” (25,000 inhabitants) both dating from the 17 century within the historic centre. Both districts show an advanced degree of building degradation, extremely high unemployment levels and particularly low educational levels, as well as high rates of dependence on submerged labor and illegal jobs.

![Image](image1.jpg)

Figure 3-14. Quartieri spagnoli (Reference: Heritage as opportunity local action plan, city of Naples)

![Image](image2.jpg)

Figure 3-15. Rione Sanità (Reference: Heritage as opportunity local action plan, city of Naples)

3-5-1-2. Measures

**Measure 1: Setting up of the economic activities.**

Supports for companies - Interventions were envisaged for technical assistance in upgrading enterprises, encouraging entrepreneurial self improvement and supporting the creation of consortia and co-operatives.
Recovery of vacant sites - The aim of the second phase was mainly that of recovering public owned decaying areas to be used as productive sites for existing enterprises in the area, in this way curbing the illegal and precarious conditions in which many Artisans and small industrial activities now operate in the neighborhoods involved in the Urban Plan interventions.

**Measure 2: Training and local employment promotion**
This measure was made up of four types of direct intervention aimed at improving social condition through direct prevention and recuperation of youth privation with specific interventions in terms of safety, prevention of deviation, information and, lastly, the inclusion of the unemployed in the working world.

**Measure 3: Infrastructure and environment**
This measure included operations aimed at the improvement conditions as well as support operations for local socio – economic development. The renovation of a public owned building was envisaged for the purpose of housing a structure and for some of the activities provided for in measure 2. Another owned building was restored as a cultural centre. Maintenance, restructuring and urban fittings were planned for the squares and main streets of the neighborhoods. The last measure was the “Implementation and publication of the results”. An information system was set up to verify and monitoring the actions envisaged.

**3-5-1-3. Results and impacts**
Thanks to the urban renewal projects and the initiatives offering new certainties, it was created a strong impetus for social cohesion and local development. Significance attaches to the investment made by a private party for the rehabilitation of a former convent in the “Quartieri spagnoli” to be used for hotel purposes; this investment was made only after that the road was completely upgraded by the Urban program (**Measure 3**).
For the implementation of the program in Naples a joint group of departments and services was mobilized, and looked after the carrying out of the program.
The municipality availed itself to a considerable extent of external consulting services and there was intense involvement and exchange of experiences with technicians and officials of the administrative structure. In spite of the size and subdivision of the
municipal enterprise there are elements for stating that the implementation of the program explicitly took on the value of an opportunity for the involvement of offices and sectors of the administration, revealing itself as a new experience even though it was not always possible to achieve a real integration of different functions, competencies, procedures and approaches.

Two hundred existing small artisans and industrial enterprises were involved (Measure1). The implementation of this measure took place in two phases. The first, lasting one year, mainly involved survey work and experimentation with the existing small artisan enterprises. This consisted of making analyses in the field in order to identify the production ‘vocations’ in the territory and to understand the environmental conditions in which the enterprises involved operated. Further experimentation was conducted on a small sample of small enterprises for the purpose of bringing hidden labor into the light of day and of setting up a legal basis important artisan activities that are often spontaneous and disorganized. The survey and experimentation was carried out by the Municipality with outside assistance on the basis of a covenant. On the basis of the survey results it was possible to define the content of the initiative. The enterprises that could benefit from a contribution granted within the minimum necessary limits had been selected by public notification, the criterion for which was decided by the Supervisory Committee. The setting up of two day centers (Measure 2) was envisaged for the purpose of prevention, providing somewhere to go for socially deprived young people at risk of deviancy. They have involved around 400 minors and 120 families, and information reached about 2,000 young people.

The intervention of security and prevention of deviancy (Measure2) provided for street educators and operators and the carrying out of initiatives able to involve 450 young people in recuperation therapies based on education and assistance. The city hall of Naples, with the “Urban Program”, had attempted, sometimes successfully, to achieve a more universal approach, emphasizing the provision of good services not exclusively addressed to the poor.

One example is that the traders and householders of the “Quartieri spagnoli” neighborhood have benefited from the improvement in the social climate and the urban fittings in the area. There is obviously the risk of the lower-middle classes being forced away and some small signs of gentrification are already visible.
particularly the “Quartieri spagnoli” area is constantly more and more frequented by tourists whose induced activity is becoming an important element for the changing and the developing of this quarter (commerce, handicraft, hotels and bed and breakfast). This is an important result got by the City Administration with the “Urban” program before all. In fact, even if there are still a lot of problems to solve, the quarter is positively changed before all in terms of security: the better environmental live ability (new commerce activities, equipment, new lighting etc.) having enlarged the sureness of the neighborhood so to become more accessible in the night time.

Furthermore the new positive image of the quarter, promoted also with the communication and information scheduled in the Urban Program on the current changes, has helped to attract out quarter living people and tourists to enter in the area that was “off limits” up to some years ago, to be able to know it and appreciate the richness of its historical, artistic and environmental patrimony. At last the “financial grants” for local businesses scheduled with the “measure 1”, gave very positive results in fact Campania Region has refinanced the enterprise, with about 1200.000,00 US dollars regarding it a “good practice” to repurpose in the neighborhoods of “Quartieri spagnoli” and “Rione Sanità”.

3-6. Conclusion

With attention to above experiences which are successful samples of revitalization, we can say there are many measures in order to improvement of historical and ancient areas and they can be different according to traits of area. These differences are in details which are sub-measures of interventions. But interventions usually are same in different areas and classify in titles such as architectural, urban and environment design, economic and social policies. Thus it is good idea to use categories of intervention in order to revitalization an area and improvement of life's quality by choosing the best measures for each of them according to traits of area. In this research physical activities such as architecture and urban design activities have been considered more than the other items because of research assumptions and objectives and their direct affect on the other activities.
CHAPTER 4. CASE STUDY

4-1. Introduction

In this thesis case study is neighborhood of Vanak village. This neighborhood is located in region 3 of Tehran. That was a small village a century ago and transformed into a critical area of Tehran during years. The process of physical, social and cultural transformation of this area has been done by itself. Some lands of area had increase of price and reach people bought them and in some parts that have legal or physical problems, rural immigrants and urban poor people settled. Thus there are poor people communities and dwellings beside the expensive complexes. This problem creates incongruous social composition and decreases social relations that were important part of residents' life and identity of neighborhood during the past years. In this chapter Vanak village had been studied as a case study after introducing the region 3 of Tehran in order to survey influenced factors of improvement historical neighborhood's physical aspect and residents' social quality of life.

4-2. introducing the region 3

4-2-1. Location and population

Region 3 is one of the 22 regions of Tehran that is located in east- north of that. This region is about 208.31 square kilometers and includes 3/4 percent of Tehran's surface. It has 6 districts and 11 neighborhoods. Region 3 is limited to Sadr, Modares and Chamran highways from north, to Resalat and Hemmat highways from south. It's western and eastern boundaries are Chamran highway and Pasdaran street. This area had lower population growth than the other areas during its formation to the present. According to Census in 2006, population of area is more than 293181 people. Average annual growth of population was about 13/1 percent from 1980 to 2006. Region 3 is the part of Tehran that its urban fabric has been the contemporary fabric and has grown after 1956. This area

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2. Information of this section has been extracted from website of Tehran's municipality and detailed plan of region 3 prepared by Sharan consulting engineers.
has formed around the rural settlements such as Vanak in the west, Gholhak and Zargande in north and Rostamabad and Ekhtiyarie in east-north of area.

Figure 4-1. The location of region 3 in Tehran (www.region 3.ir)
4-2-2. Background of area's development

Development of construction and population settlements in Tehran suburb developed during the reign of the second Pahlavi. In this time surface of city was about 18000 hectare and population of city and its suburb was 1560000 people. Until this time Tehran was the center of Tehran County and Tajrish was the center of Shemiran. There were villages between development of north of Tehran and southern boundary of physical development of Tajrish that are exposed to integration of physical fabric of these two cities. Today the range of region 3 of Tehran is located exactly in the same area that was not the legal range of both cities. Tehran municipality supported and serviced to Tajrish and its villages and physical fabrics of Tehran following the approval of municipality law in 1955 and development of municipality duties and its services range and also following the necessity of living the king in the capital of city. So for the first time region 3 of Tehran municipality had been known as an urban range. Thus many villages that were in this part integrate in city as a part of that. The major construction in range of region 3 began after this time. Organic fabric of villages gradually renovates and checkered fabric developed in the agricultural lands. Public ownership of two very large zones of this area (Military Lands ,Abbas abad hills in south and international exhibition, broadcasting building in north ) beside the private and small ownership among them and beside Current regulations and approved guidelines for them, is present problem of physical space of area. It eliminated gardens and houses gradually and just remain their memories. Records of Tehran's development shows there were effective factors in evolution of region 3 .some of them were External factors and some of them were internal factors. External factors include:

- Establishment of lands of region 3 on the favorable development direction of Tehran.
- The rapid growth of Tehran's population and becoming metropolitan.
- Peripheral growth and joining of Shemiran and Tehran that includes the region 3 of Tehran.
- Construction of highways that cross from region 3
- Immigration of people from old areas.
• Conversion of buildings model (tendency to height and increasing building density)

Internal factors include:
• Desirability and attractions of the natural environment of region 3.
• Lack of physical opponent in empty lands of region 3.

4-2-3. Geographic features

With attention to natural location of area in the southern slopes of the Alborz mountain, this area has the following features:
• Located on lands between mountains and plain
• Located on eastern-western strip and contains highlands of south of the Alborz mountains. Respectively, from East to West they are Lavizan, Abbas abad, Pardisan and Chitgar.
• Having good water resources
• Having many effective and diverse slopes such as Davoodiye and Abbas abad hills.
• Having original and big green elements such as Taleghaniand Mellat Park.
• Having gardens such as garden of British embassy and gardens of Vanak.
• Having ecological corridors such as Valiasr, Shariati and Mirdamad streets.

4-2-4. Economic features

Region 3 of Tehran has economic prosperity because of its activities types and the level of residents' income. Some relevant parameters are as follows:

• Its inactive population is less than average of Tehran. (Ratio of 3/5 to 3/8 people in Tehran)
• Having the second place of knowledge economy because of high-ranking managers and senior administrative staff and staff of scientific and technical business among employees who are residents of the area.(49.3%) that is about twice the average of Tehran(25.1%)\(^3\)
• Industrial jobs, drivers and low-skilled workers in the area (15.7%) are less than half of average of Tehran (39.9%)
• Privileged position of area to site selection for premier activities.
• Increased economic activities from about 6.9 thousand units in 1996 to 11.4 thousand units in 2002.

\(^3\) Listed statistics are obtained from census in 2006 (Statistical Center of Iran) and studies of Tehran's master plan in 2005.
<table>
<thead>
<tr>
<th>Social - economic and physical indicators</th>
<th>Region 3</th>
<th>Tehran</th>
<th>Compared the region with Tehran</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>293181</td>
<td>7738000</td>
<td>3.78%</td>
<td>Census of Population and Housing, 2006</td>
</tr>
<tr>
<td>Employed</td>
<td>128325</td>
<td>192600</td>
<td>66.6%</td>
<td>Census Workshops in 2002</td>
</tr>
<tr>
<td>The number of residential units</td>
<td>90700</td>
<td>1850000</td>
<td>4.9%</td>
<td>Estimated in 2006</td>
</tr>
<tr>
<td>Average of residential buildings density (percent)</td>
<td>160.7</td>
<td>164</td>
<td>0.97 ratio</td>
<td>Audits of Properties 2003-2004</td>
</tr>
<tr>
<td>Average of residential stories</td>
<td>3.11</td>
<td>2.24</td>
<td>1.38 ratio</td>
<td>Audits of Properties, 2003-2004</td>
</tr>
<tr>
<td>Average of residential components area</td>
<td>411</td>
<td>214</td>
<td>1.9 ratio</td>
<td>Audits of Properties, 2003-2004</td>
</tr>
<tr>
<td>Family density in residential unit</td>
<td>1.02</td>
<td>1.1</td>
<td>0.92 ratio</td>
<td>Census of Population and Housing, 1996</td>
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<tr>
<td>Impure density of population</td>
<td>100</td>
<td>125</td>
<td>0.8 ratio</td>
<td>Census of Population and Housing, 2006</td>
</tr>
<tr>
<td>Pure density of population</td>
<td>291</td>
<td>442</td>
<td>0.65 ratio</td>
<td>Census of Population and Housing, 2006</td>
</tr>
<tr>
<td>Average of family income</td>
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<td>350000</td>
<td>1.81 ratio</td>
<td>Plan of family income, Statistical Center of Iran, 2001</td>
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<tr>
<td>Average of building density</td>
<td>95.3</td>
<td>119</td>
<td>0.8 ratio</td>
<td>Audits of Properties, 2002</td>
</tr>
<tr>
<td>Average of stories</td>
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<td>2.13</td>
<td>1.41 ratio</td>
<td>Audits of Properties, 2003-2004</td>
</tr>
<tr>
<td>Average of components area</td>
<td>714</td>
<td>323</td>
<td>2.2 ratio</td>
<td>Audits of Properties, 2003-2004</td>
</tr>
<tr>
<td>Density of people in residential Unit</td>
<td>3.23</td>
<td>4.1</td>
<td>0.77 ratio</td>
<td>Ratio of population to residential units, 2006</td>
</tr>
</tbody>
</table>

Table 4-1. Social - economic and physical indicators of region 3 of Tehran
4-2-5. The main arteries of area

According to figure 4-3, access network of area classify as follows base on the role that play in Transportation and Access:

4-2-5-1. Highways

Hemmat highway: Longest Highway of Tehran that connects east of city to west of that. In addition it is an ecologic axis because itlocates on a green context.
Chamran highway: it is constructed with a length of about twelve kilometers to connect the centers of north of city to Mehrabad airport.
Resalat highway: it begins from Modares highway and continues to Shariati Street.

4-2-5-2. Arterial level 1 & 2 ways

Arterial ways network of area consists of equipped urban accesses that have special social position because they have active functions in their bodies. In addition they connect centers and main parts of spatial organization.

4-2-5-3. Collector and distributors ways

Collector and distributors ways connect relation between local streets and arterial ways. They are important parts of access network for residents of area.
Access network of area has been determined on figure 4-3.

Figure 4-3. Access network of region 3
(Sharan Consulting Engineers, Detailed plan of area)
4-2-5-4. Local accesses

Pedestrian ways are important parts of urban spaces. They provide access to neighborhood services and create face to face social relations in neighborhoods. Pedestrian network of area and attractive situations in rout of network have been determined in figure 4-4. The purpose of attractive situations is land marks that some of them are functional nodes and edges such as squares and river and some of them are visual that are identity centers in area.

![Pedestrian network and visual elements](image)

*Figure 4-4. Pedestrian network and visual elements (Sharan Consulting Engineers, Detailed plan of area)*
4-2-6. Spatial organization of region 3

Spatial organization consists of functional and physical structures and also visual organization. In region 3, most elements and main components that play important role in identity of area, usually are located in west of that and eastern half has shortage despite having high functionality. In figure 4-5, spatial organization of region 3 and elements that need to improvement for solidity of this organization have been determined.

![Figure 4-5. Spatial organization of region 3](image)
(Sharan Consulting Engineers, Detailed plan of area)
4-2-7. Zoning of region 3

According to detailed plan of area, zoning of region 3 is as following figure:

![Diagram of Zoning of Region 3](image)

Figure 4-6. Zoning of region 3  
(Sharan Consulting Engineers, Detailed plan of area)

4-3. Introducing the Vanak village

Vanak is an ancient village of Tehran and has two parts, one of them is old area and the other one is new. Old context that is contain Vanak village, has been a Promenade near the Tehran with a lot of berry trees. The shrine of Ghazi Saber, Mostofi garden and tire factory are historical places of this neighborhood. During the recent decades, Vanak village passed through a lot of vicissitudes in related to city as an element of Tehran

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4. Information of this section has been extracted from development Plan of Vanak Neighborhood prepared by Municipality of Tehran
metropolis. This village has been received considerable attention in late Qajar\textsuperscript{5} period and during the whole Pahlavii\textsuperscript{6} period as one of the summer Promenade in north of Tehran. It was welcomed by specific income groups at the beginning of accelerated growth of Tehran in fifty and sixty decades. Also it came an island in Tehran metropolis and has been transformed from rural environment to an incongruous context in years after evolution of Iran. These changes caused physical-functional, population structure and social features changes. This neighborhood today has antithetic urban context and culture. It faced with many problems such as immigrants' illegal reconstructions, visual and noise pollution, traffic problems, narrow streets and cultural problems. but this area has positive features and opportunities such as wide gardens, springs, partially diverse land uses and many open spaces which are useful for planning in area and reducing physical and cultural conflicts.

4-3-1. Location of neighborhood

Vanak village which is located in west of region 3, is 142 acre that is about 4.7% of region 3 and is surrounded with main highways and streets which are Niyayesh highway in the north, Molla Sadra street in the south, Chamran highway in the west and Sheikh Bahae street in the east.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{image.png}
\caption{Location of Vanak village in Tehran (Sharan Consulting Engineers, Detailed plan of area)}
\end{figure}

\textsuperscript{5}. Persianized Iranian royal family of Turkic origin, which ruled Persia (Iran) from 1785 to 1925.

\textsuperscript{6}. two monarchs who ruled Iran/Persia between 1925 and 1979
4-3-2. Vanak village in Tehran's detailed plan

Vanak village is one of the a few remaining natural valuable contexts such as gardens. In recent years, gardens of this area have attacked by illegal constructions and image of area has destroyed. For this reason preventing from uncontrolled constructions, aqueducts and gardens revitalization, organizing the neighborhood's square and its connection to the suggested pedestrian network is a necessary plan for garden's revitalization and it can be effective for optimal use of this area benefits and its revitalization again.

4-3-3. Historic background and Physical development

Initial core of Vanak village is located in the southwest of Tajrish. This village was one of the large villages of Shemiran. Lands of this area were imperial properties during the period of Naser al-din shah that he awarded them to Mostofı Almamalek. He started to develop the area and to build something such as aqueduct that caused growth and prosperity of area. physical, social and ownership changes in Vanak village is devided into three period:

First period: development of Vanak as a summer village of old Tehran.
Second period: very slow physical and social development.
Third period: range of Vanak village as a part of Tehran's urban context.

In 1956 the construction in area contained houses of lords and rural people in the north of area near the current park of Vanak and military factory in current location of railway's education center. The rest of the area was covered by gardens and farmlands. The main access of area was a straight road to Pahlavi road and the other accesses were just dirt roads. In these years, urban development has no effect on physical development

7. Shemiran is the capital of Shemiranat County, Tehran Province, Iran, but is actually located just north of the borders of Tehran County along Chamran Expressway and Sadr Expressway and it is the northernmost district of the city of Tehran.

8. He was the King of Persia from 17 September 1848 to 1 May 1896 when he was assassinated.

9. He was an Iranian Politician who served as Prime Minister of Iran on six separate occasions.
of village and its functions. Because population and physical growth of Tehran was slow and there were wide lands between northern context of city and Vanak village.

Between 1956 and 1963 small physical development such as destroying the western gardens of military factory and its conversion into school of girls and limited development of residential parts in the west of old core occurred in this area. In addition, limited construction is seen in the south of area among the farmlands. During these years, development of access network was an eastern- western axis. This axis improved the northern-southern axis that connected residential part to farmlands and gardens. This period is very important part of Tehrans physical changes and development.

Between 1963 and 1980, development of Vanak village around the center core, factory's lands and current Alzahra University continued. In addition to, some constructions have been done in gardens. During these years, the important happening was connection between Vanak village and Tehran. Development of Tehran from Valiasr Street and its connection to Vanak village, caused joining this area to eastern districts. In addition to construction of Chamran highway made a specific location for area and many gardens and residential buildings located near the highway.

Between 1980 and 1995, most part of construction took place in Vanak village range and it's around. Some of them are development of central core toward Sheykh Bahae Street and Chamran highway and regular constructions in north and south of area. Growth of construction in these years destroyed the farmlands but the gardens were maintained. Between 1995 and 2003, most part of construction took place in gardens range and destroyed them. These constructions are done illegal with low quality and developed toward the edge of highway. Continuation of this trend will destroy gardens as soon as possible. Figure 4-8 shows physical development of area during the last years.
4-3-4. Evolution of neighborhood in detailed plan of region 3

In detailed plan of region 3, Vanak village has been seen as an important part, because it has natural values such as gardens and aqueducts. As mentioned in recent years, illegal constructions and original residents' immigration from this neighborhood caused some problems and damaged the neighborhood's social and physical quality. Thus existence of a revitalization plan for neighborhood is necessary to protection the gardens and aqueducts revitalization and to create liveliness neighborhood. Most important policies that are considered to gain this aim are improvement of pedestrian paths, revitalization of Vanak square as a main node of spatial structure that plays functional and social role and renewal the old contexts.

4-3-5. Climate and Environment

Vanak village is located in the southern foothills of Alborz Mountain. The soil of this area has high resistance Southern part of Alborz that is located at the north of area has
9090 high peaks such as Tochal\textsuperscript{10} and Darabad\textsuperscript{11}. Rivers in the southern foothills of the Alborz which lead rainfalls to the south and faults of the region played effective role in area's morphology. Vanak is one of the few southern foothill plains of Tochal and is relatively flat that is very fertile and suitable for agriculture. Most rainfall occurs in March and least rainfall occurs between July and September. According to meteorological stations statistics that is located at the north of studied area, the average of temperature is 14.2 degrees Celsius.

Most pollutant factors of area are located around the main square and eastern edge of range. They are car repair stores which are most pollutant centers, because their residual material combines with aqueduct water and is driven toward the southern grounds of area. Other pollutants are household waste, because there is not any specified place to collecting the waste. Particularly in the west of range and near the gardens, pollution is well visible. In the edge of gardens without fence and in the water stream at the foot of the old trees, waste is seen as an environment problem.

\begin{figure}[h]
\centering
\includegraphics[width=0.4\textwidth]{image1.png}
\caption{Car repair stores around the main square as a pollutant factor (reference:author)}
\end{figure}

\begin{figure}[h]
\centering
\includegraphics[width=0.4\textwidth]{image2.png}
\caption{Waste in the water stream (reference:author)}
\end{figure}

\textsuperscript{10} Tochal is a mountain in the Alborz range and a ski resort adjacent to metropolitan Tehran, Iran.

\textsuperscript{11} Darabad is a former village on the slopes of the Alborz mountain range to the northeast of Tehran.
4-3-6. Social and cultural characteristics

Until two decades ago, Vanak village did not have fundamental difference with a century ago. At this time migration to this area increased, most immigrants were rural people who did not have good financial status. They began to illegal constructions and urban management did not attend them. Thus today the old part of area, around of Vanak village square and most important part of that, which is the old core of village in the northwest of square contain different social groups of old residents, farmers, new urban and rural immigrants. Most residents of square's north and northwest are old owners and middle or high income groups. Existence of old rural houses, manor houses and modern residential complexes show there is social heterogeneity between residents in this part. The context around university does not have good quality despite its short history, because of accelerated constructions and using the inappropriate materials. In addition to, it includes rural and urban immigrants. Unfortunately these groups do most crimes and the society was thrown into disorder by them. New contexts of north and south of area range mostly are made in two last decades. These contexts are organized; also there is social congruence between residents. The middle social and cultural groups live in houses of these new parts. This congruence in new northern part is less than southern part. Because proximity to Molasadra and Sheikh Bahae street is effective on lands and buildings price. So high income people, choose there for living. While the northern streets of this range, have lower level of physical quality and social congruence.

4-3-7. Demographics

Tehran's region 3 is about 2992 hectares. It is 4.9% of Tehran's area. Vanak village range is 142 hectares and it is about 4.7% of region 3. Its population was 16404 people in 2006 according to Statistical Center of Iran's information. This means 115 people live in per hectare of this neighborhood. This population is located in different social contexts of area.
4-3-8. Economic features

Most part of employment and activities of area belong to public, social and private services. It is about 43%. Water, gas and electricity supply is the lowest part and about 0.5%. Two major groups of occupational groups are as follow:
834 people work in Wholesale, retail, hotel and restaurant. This is about 7.23% of the total. Education part is about 18.5%. It is the largest share of activities in the project area.

4-3-9. Land uses

According to the duration of residence in the Vanak village, we can say residential land use is the highest level of land uses in this area. Table 4-2 shows that and according this table green spaces (parks & gardens) are in grade 2. This area has many gardens and green spaces because it's special natural and historical features. In some cases such as Vanak Park, garden has been turned into a public park which has a performance beyond the scope of the project.

Access network with a share of 11% of the area, is in the third level. The fourth level is belonging to universities that has a performance beyond the scope of the project and is active in city and even in country. Alzahra University and its related buildings such as dormitory and railway education Center and attached buildings to that are included in a wide range.

Useless lands are located in the fifth level of area's main land uses. They are dispersed lands in the whole of area. Most parts of these lands are located in the edge of Chamran and Niyayesh highways which are like a marginal lands or destroyed gardens. Some of other lands of area can be use for services of area. There are 5 mosques in the neighborhood as religious places. Vanak village has a grand mosque in the main core of area like many of old and traditional neighborhoods. Cultural land use is a small part of land uses and the neighborhood is faced with shortage of cultural spaces. Vanak village has two health care centres. One of them is near the main square and another one is beside the Sheikh Bahae Street. These centers only provide the basic medical needs of northern part of neighborhood and in terms of health care; area is faced with shortage of health care services. Sport places are seen in three points of area and the overall, area is faced with shortage of sport spaces too. One of land uses that create some problems

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such as environmental pollution and crowding because of attract audiences from outside the area, are car repair stores.

<table>
<thead>
<tr>
<th>NO.</th>
<th>Existing Land uses</th>
<th>Land use surface (sq.m)</th>
<th>Share of total surface (%)</th>
<th>Existing capitation (sq.m)</th>
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</thead>
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<tr>
<td>1</td>
<td>Residential</td>
<td>981492</td>
<td>36.65</td>
<td>23.92</td>
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<tr>
<td>2</td>
<td>Green space (park &amp; garden)</td>
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<td>26.53</td>
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<td>3</td>
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</tr>
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<td>4</td>
<td>University</td>
<td>862129</td>
<td>9.66</td>
<td>6.30</td>
</tr>
<tr>
<td>5</td>
<td>Useless lands</td>
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<td>7.93</td>
<td>5.17</td>
</tr>
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<td>6</td>
<td>School</td>
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<td>1.18</td>
</tr>
<tr>
<td>7</td>
<td>Military</td>
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<td>1.61</td>
<td>1.05</td>
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<td>8</td>
<td>Commercial-residential</td>
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<td>0.61</td>
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<td>Abandoned</td>
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<td>0.71</td>
<td>0.47</td>
</tr>
<tr>
<td>12</td>
<td>Sport</td>
<td>6045</td>
<td>0.43</td>
<td>0.27</td>
</tr>
<tr>
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<td>Religious</td>
<td>3065</td>
<td>0.4</td>
<td>0.26</td>
</tr>
<tr>
<td>14</td>
<td>Car repair stores and workshops</td>
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<td>0.36</td>
<td>0.23</td>
</tr>
<tr>
<td>15</td>
<td>Storage</td>
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<td>0.26</td>
<td>0.17</td>
</tr>
<tr>
<td>16</td>
<td>Health care</td>
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<td>0.12</td>
<td>0.78</td>
</tr>
<tr>
<td>17</td>
<td>Cultural</td>
<td>2061</td>
<td>0.09</td>
<td>0.58</td>
</tr>
</tbody>
</table>

Table 4-2. Level and capitation of urban existing land uses in Vanak village (Sharan Consulting Engineers)
4-3-9-1. Activities type

There is a lot of car repair store in the neighborhood and particularly in the Vanak village square. Also there are other related stores which sell car instruments. It is an inconsistency, because this square is a local square and a most important public and open space for residents. But there are just a few stores which sell necessary needs such as food. In addition Alzahra University is located very close to that and there is not any coordination between university as an education centre and car repair stores and also between their users.

4-3-9-2. Activities working time

Working Time of commercial activities is often from morning to the evening and just some activities such as clinic or pharmacy are working during the night. There is not any night working store in the square and it is very dark and unsafe. Thus it seems the neighborhood needs to night working activities to improve the security. Following figure shows diversity of land uses and their location in the neighborhood.
Figure 4-11. Land uses ((Sharan Consulting Engineers, Detailed plan of area & Site visiting )
4-4. Physical features

4-4-1. Neighborhood morphology

Vanak village has been formed from four different contexts. These contexts are according to the figure 4-12.

4-4-1-1. Old area

This area like many other old areas has irregular and organic networks in some parts. Dense and semi-dense contexts make old parts of this area and its fragments have been formed in different levels and directions but in newer parts of this area, density is less and fragments are newer and regular and their direction is northern-southern. This area has different land uses such as residential, commercial and services. Because the old Vanak village square with active commercial body and a commercial path which is ended to Chamran highway is located in this area.

4-4-1-2. Semi-new area

Semi-new part of area is located on the east of neighborhood. It has been formed after 1980 and it has irregular networks with different sizes and irregular shapes fragments. Thus their directions are different and they have been made in northern-southern or eastern-western directions based on ground conditions that are created a heterogeneous context. Eastern edges of this area have different functions such as services and commercial because of proximity to the Sheikh Bahae Street and its internal core is residential.

4-4-1-3. New area

This part is located in north and south of area. It has created different context completely. Regular northern-southern fragments and regular eastern-western networks are one of this area's features and they create homogeneous context. Residential parts of this area do not have many problems. Because they have affordable access quality and just to be away from neighborhood's services is a functional problem. This area has
good visual quality, because it has good construction quality and continuous green space in the streets.

4-4-1-4. Self formed area

This form of construction is seen in western part of Vanak village. These are illegal constructions and often have been formed in gardens zones and are full of exhaustion and poor health care. This area is not very old and is one of the gardens destruction factors. Area's accesses are often irregular networks. Fragments are small and their quality is low.also their direction is different based on ground conditions. Most parts of this area are residential spaces and there are some local commercial spaces. Thus, this area does not have suitable networking system. Most important problem of area is inappropriate and difficult accesses for cars and pedestrians because of long distances from main paths.
Figure 4-12. Neighborhood's morphology
(Sharan Consulting Engineers, Detailed plan of area)
4-4-2. Access network

Vanak village is located in a reasonable hierarchy network. Chamran highway (arterial level 1) without any connection with neighborhood is located on the west of that. Niyayesh highway (arterial level 1) is located on the north of neighborhood. But there is not any correct connection between that and northern-southern axis. Mola Sadra Street (arterial level 2) is located on the south of neighborhood and there is not any connection from that to inside the neighborhood. Northern- southern Sheikh Bahae Street on the east of area is the only axis that connects Vanak village to Tehran's public network. Internal network of Vanak village which is located among the above four accesses is a local network. This means:
• In this network, there is not any traffic passing with origin and destination outside of Vanak village. Origin or destination of each vehicle can be seen in the network is in the neighborhood.
• In this network, access to uses (residential, cultural, commercial and so on) is strong.
• In this network, social interaction between people is very important.
The most important intersection of neighborhood is Vanak village square which is a location for residents' interaction, self made taxi terminal, daily commercial location and even is a location for car repair stores. Vanak Street is the most important exit from Vanak village to Tehran's public network.
Figure 4-13. Neighborhood's accesses network (reference: author)
4-4-3. Age of buildings

Date of area's formation and demand for construction is an effective factor on the average age of buildings in four parts of area. The result indicates most construction in the past 10 years is in the new part of area and self-formed area that their age is between 9 and 11. These new fragments are scattered within the new context and there is trends for construction in the whole of this part because of equal conditions. But most constructions of self-formed area are in gardens range and have been formed in 1996 and 1997 and sometimes there is a 10 years old or younger alley. The remaining buildings from basic core of Vanak village in old part of area which have most average of age (around 22 years) confirms this part of area is old. Also in this area 50 years old or 5 years old buildings are seen sometimes. Semi new part of area is 20 years old on average, despite the renewal of fragments. This is because of Alzahra University and railway education centre's ages, which are 30 or 40 years old and are located in this part of area. Following table shows the average age of buildings in four parts of case study.

<table>
<thead>
<tr>
<th>Parts of neighborhoods</th>
<th>Average age of buildings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Old area</td>
<td>22.5 years</td>
</tr>
<tr>
<td>Semi new area</td>
<td>20 years</td>
</tr>
<tr>
<td>New area</td>
<td>11.8 years</td>
</tr>
<tr>
<td>Self-formed area</td>
<td>9.7 years</td>
</tr>
</tbody>
</table>

Table 4-3. Average age of buildings (Sharan Consulting Engineers)

4-4-4. Quality of buildings

According to site visiting, existing buildings are divisible into the new, restorable, ruined and preservable. In the new part, most of buildings are preservable. In the self-formed part, most of buildings are restorable and ruined, there are a few preservable buildings. In the old part, half of area has preservable buildings and other buildings are restorable and ruined. These buildings are seen in the east and south of context and created a complex of restorable and ruined buildings. In the range of semi new area,
preservable buildings are in first priority and restorable examples are often in the east and north of university area which most of them are remaining buildings from 60 decade that include ancient schools or remaining buildings of Vanak village old factory.

4-4-5. No. of buildings story

Number of buildings stories has a direct effect on density indicates (buildings and population). In other words, number of stories has an effect on the building density directly and an indirect effect on the population density. Therefore, Survey of the studied area in terms of buildings stories distribution gives detailed understanding of the physical situation. In addition it is very effective in recognizing non-physical situation.
The result of surveying the studied area according to table 4-4 shows increasing the number of stories is in the new part of area which indicates high price of lands, good accesses for cars and pedestrians and issuing permits for constructions in this range of neighborhood. However a few 6 stories buildings are seen in this part that have found a tendency to the edge of Molla Sadra or Sheikh Bahae street because of suitable access to the roadway. Most construction is 5 or 6 stories buildings which contain a high percentage of new buildings. In fact we can say suitable wide of streets and direct access to the main street increased the number of buildings stories. But existing two stories buildings prevented from change of area's image completely. High percentage of buildings with more than 3 stories indicates the high density of population in this part. Self-formed part with the high level of construction has the lowest average number of building stories than the other parts of neighborhood. This is because of illegal and without permit constructions that does not allow constructors to increase the number of buildings stories. These buildings are made in two stories and sometimes are made in less than usual height and they created an area that is almost uniform because they have an equal height approximately.

Old part despite reconstruction in some spots and increasing the number of buildings stories has an average height about 2 stories, because it has some buildings with just 1 story. In fact the central core of this part has average 1 or 2 stories buildings in a few cases. But there is tendency to increase the height in bigger fragments in the south of this part such as in Bagh Hesar alley and passage way which is ended to that.

In the semi new part of neighborhood, tendency to construction increased the height of buildings to 4 stories. But there are 1 story buildings in this part which has caused average about $\frac{1}{2}$ stories.

<table>
<thead>
<tr>
<th>Parts of neighborhoods</th>
<th>Average number of buildings stories</th>
</tr>
</thead>
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<tr>
<td>Old area</td>
<td>2 stories</td>
</tr>
<tr>
<td>Semi new area</td>
<td>2.1 stories</td>
</tr>
<tr>
<td>New area</td>
<td>3.2 stories</td>
</tr>
<tr>
<td>Self-formed area</td>
<td>1.8 stories</td>
</tr>
</tbody>
</table>

Table 4-4. Average number of buildings stories (Sharan Consulting Engineers)
4-4-6. Valuable and historic places

Vanak village had many valuable natural and artificial elements because of its historical precedents and a few of them have remained preserved yet.

4-4-6-1. Mostofi almamelek garden

This garden is 250 years old and is one of the Qajar gardens. It is located in the end of northern part of Vanak village and has a lot of trees, aqueduct, a building and pleasant environment resulting from the proximity of these elements which is unique and valuable. In the current situation, it is maintained by municipality of Tehran as a sample of Iranian garden and is used by many visitors as a historic park.

Figure 4-18. Mostofi almamelek garden (www.google.ca)

4-4-6-2. Alzahra University

The current range of university is the ancient garden that is burial place of Mostofi Almamelek and some of his family. This garden is endowed by Mostofi. In the historic writings, this garden has been described as an extensive garden with Tall plane trees. Before turning the garden into the college of girls and after that university, the tomb of Mostofi had a large yard and buildings in the north and south of the garden which Mostofi and his son have been buried in the southern building. Today it is a fumes university of Iran and has many buildings for different sciences.
4-4-6-3. Judge Saber shrine

Judge Saber shrine is a tomb that is located in the south of Alzahra university. Its architectural style belongs to the Qajar period and its main architectural structure has been preserved yet. It is an octagonal building that its entrance is related with the street which is in outside the dedicated Vanak garden by a small and rectangular corridor.

Figure 4-20. The entrance of judge Saber shrine (taken by author)
4-4-6-4. The old square of Vanak village

The old square of Vanak village and it's around have historical and environmental value because there were ancient buildings and many gardens. Unfortunately today the image of square is defaced because of existing car repair stores and a lot of green spaces and gardens in neighboring the square have been vanished because of constructions during the time. But remaining parts have high urban and environmental value.

Figure 4-21. Remaining ancient building (taken by author)

Figure 4-22. Current image of square (taken by author)

4-4-6-5. Ancient passage

One of the most important path of neighborhood is a way between the main square and northern part of neighborhood that was an important connection between Mostofi garden and Vanak village square in the past. In addition there are many old and historic buildings in the body of this rout which turn this way into a valuable passage.
Figure 4-23. Valuable and historic places (reference: author)
4-4-7. Neighborhood's open spaces

Open spaces could improve the image of neighborhood and its external appearance. Vanak village has a lot of open spaces that include local squares and many green spaces. Some of the gardens do not have any wall or fence and unfortunately turned into a big box of garbage. Most of them are located at the west of neighborhood and in the self-formed part of that. But there are useful and important open spaces in the old part of neighborhood which are Mostofi garden (Vanak big park), Vanak village square and its southern garden.

4-4-7-1. Mostofi garden (Vanak big park)

Vanak big park is the biggest garden of neighborhood as a part of neighborhood image. It is valuable because of maintenance and old trees. In addition it is located near the main old passage and plays an important role in ecological status of neighborhood. Therefore its maintenance and preservation is very important.

4-4-7-2. Vanak village square

This square approximately is located in the centre of neighborhood's old part, in fact it is a node of roadway. Commercial activities are located around that and most of them are car repair centers. There is irregular motions and traffic jam some times because it is not too big and does not have a regular geometric shape, and repair stores customers that are barrier crossing. In addition main accesses cross that into neighborhood. Therefore there is not any safety for pedestrians in this open space.

4-4-7-3. Southern garden of square

There is another garden in the south of square. It is very important space because it is green space and it has access by a main street from square into Shrine of judge Saber. Of course in current situation it has wall and there is a health care building in this garden. But it has a strong potential for using by people who are pilgrims of shrine as an open and public space.
Figure 4-24. open spaces (reference: author)
4-4-8. Quality of surrounded open spaces

As mentioned above, existing gardens as open spaces are surrounded by wall. So evaluate of Vanak village square surrounding is very important as a most important public space of neighborhood. This evaluation is from two aspects, the first one is ratio of height to width. According to figure 4-24, dimension of square approximately is 30 x 65 sq.m and its approximate ratio of height to width in section no 1 is 1 to 10 and in section no 2 is 3 to 10. So average ratio of height to width in square is 1 to 5. The second one is the amount of continuity between facades, there are not many distances between square's surrounding buildings and just there is 3 distances as the ways which are ramified from square to the different parts of neighborhood. Therefore the square is not enough surrounded as an urban space according to importance of surrounded spaces in chapter 2.

Figure 4-25. Evaluating the surrounding of square (reference: author)

4-4-9. Corners, intersections and entrances

Corners and intersections of street's body are the most important factors in relation between urban blocks. Body composition richness of urban spaces such as streets or squares depends on architecture and composition of corners.\textsuperscript{12}

\textsuperscript{12} - Tavasoli, Mahmood,2001,Urban design of Kargar street, Ministry of Housing and Urban planning

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Unfortunately there is not any valuable corner or intersection in the studied neighborhood. Just there are some important entrances such as entrance of university and shrine as you can see in figures No 4-19 and 4-20.

4-5. Landscape of neighborhood

The best landscape of neighborhood is related to the west of area that contains the old and self-formed parts. This is because of natural and rural state of that. Northern-southern axis has created very beautiful corridor because of network of trees. But unauthorized constructions in recent decades, irregular and self-formed areas that are located on the slope, along the Chamran highway have created poor visual quality. so this part of highway has undesirable landscape.

Alzahra University describes the identity of area as an identity of higher education in the city and country level and gave functional legibility to this area. Anyway this complex does not have special character because of its buildings visual disturbance. Currently, the Vanak village square does not have physical (architectural) and functional legibility because as a landmark. Its surrounding buildings and land uses have overshadowed the visual dominance of square. Interference of cars and pedestrians, dominance of roadway, activities of daily shopping, social interactions that is affected by new context, with buildings that are approximately same in terms of form, height and regular network access did not give any special urban landmark to the neighborhood and just describe the residential function as legibility of neighborhood.

Sheikh Bahae Avenue as an urban layer with different function, incompatible and even intruder, non-identical heights, non-homogeneous materials and non-harmonized architectural design details, has made visual disturbance along the this street.
4-5-1. Visual quality of square

In most parts of neighborhood and particularly in the old part of that, the visual value of buildings is low. Visual quality of square buildings as a most important space of neighborhood has been evaluated in the following figures according to architectural elements of buildings. Visual disturbance, congestion of population and density of cars reduced the value of the square as an urban space. There are not some elements which create visual coherence or unity of form between facades in different sides of square. Visual disturbance of facades, noise and air pollution because of vehicles density decreased the value of space in the square.

Figure 4-27. Visual quality of square (reference: author)

4-5-2. Urban furniture

Urban furniture is one of the most important factors of landscape improvement. In addition they are used for the comfort and convenience of the people and could say to them how they can enjoy space and behave there. So it is important to use them according to people's needs, architectural and special values. In the studied area, there is not enough urban furniture. In addition lack of beautiful design and their inappropriate
location have caused visual disturbances. Neighborhood's furniture does not have any special identity based on its age and history. They are same as furniture in other parts of city. In some parts of neighborhood furniture congestion is blocked the walking rout. Following images show status of neighborhood's furniture.

Figure 4-28. urban furniture type and density  (taken by author)

Figure 4-29. urban furniture is blocked pedestrian's way  (taken by author)

4-5-3. Volumes and sky line

As mentioned before, has not been any attention to the landscape and visual connection between adjacent buildings in the studied neighborhood. Also specific arrangements have not been considered to preservation view to the important regional and local landmarks and for no interference and visual impact on them. Consequently there is a mass of buildings and unrelated land uses to each other but side by side.
Some of them have visual and artistic values and innovations, but when they create an urban landscape together, do not have any attraction for visitors. This happen particularly in the old part of neighborhood because of poor quality materials, inappropriate size of fragments and height of buildings. In addition there is not desirable sky line because of differences between height of new and old buildings.

4-5-4. Confounders of neighborhood image

Confounders of studied neighborhood are divided into several groups as below:

4-5-4-1. Extensions of buildings faces

Extensions of buildings faces are signs of commercial activities in the centre of neighborhood and among residential context, and also added mechanical facilities to the buildings facades.

Figure 4-30. Extensions of buildings face (taken by author)

4-5-4-2. spoiled face of buildings

There are many buildings without designed face in the studied neighborhood. Their face is from brick or cement and they do not have any stone cover. Most of these buildings have excess materials and tools on their roofs because of lack of standards for construction.
4-5-4-3. Urban facilities

Some of the urban facilities of studied neighborhood such as electrical facilities have created undesirable landscape and have destroyed the urban image. In some cases they are located in the narrow alleys and are as an annoying physical obstacle especially against the motion of vehicles. In addition there are a lot of dispersed electric wires and cables because of illegal constructions in the area which are another factor in creating undesirable landscape.

Figure 4-32. example of Urban facilities as a confounder of neighborhood image (taken by author)
4-6. Spatial structure of Vanak village and its major elements

Structure is a collection of a column and interconnected network of land uses, different and various urban elements that give coherence to the city. Physical and special structure of area has different models. These models can be regular or irregular and are effective on the formation of structure of natural and artificial factors, different functions and educational, cultural and social characteristics. Network of main roads are the most important character of main visual structure to communicating between its components. This means spatial structure is effective in the visual structure and it helps for legibility of area. So just physical continuity is not enough for that and spatial-visual coherence is necessary in addition to activity and mental continuity. Therefore we can define the spatial structure elements of Vanak village as below.

4-6-1. Main roads

Eastern-western axis of Sherafati Avenue is one of the most important paths of neighborhood that begins from Sheikh Bahae Street at the east of neighborhood and its ends is near the Chamran high way just by walking. There are some commercial functions in this direction which are creative elements of continuity and they are especially after the Vanak village square.

Northern-southern axis of Majidpoor and Saberi avenues are the other most important paths of neighborhood. They are according to topography of area and there is a significant difference between the level of south and north of area. Providing visions and perspectives, in order to visual communication and increase the spatial diversity is another result of conversion the way into a spatial element.

4-6-2. Edges of neighborhood

There are roads around the studied neighborhood that play main role in definition the neighborhood and help to improve the legibility of that. These roads are important accesses in the city. So Vanak village is legible because of good definition by its boundaries.
4-6-3. Nodes and open spaces

Open spaces of neighborhood can improve the external appearance of that, not only the internal image of neighborhood. They are open green spaces and wide gardens which are a combination of buildings, various uses and private, public or semi-public ownership. Mostofi garden as a historic and valuable garden and other gardens at the south of that and south of the square and also Vanak village square as a main important social, commercial and traffic node, are spaces that play main and special environmental role in the spatial structure of neighborhood.

4-6-4. Landmarks and main elements

Vanak village square as a social centre and traffic node is one of the most important landmarks of neighborhood. Its functional aspect is very effective on the people's perception of space as a landmark. It is not large enough and does not have any special element to being a landmark in the city. It works as a landmark just at the neighborhood but it is known at the district because of car repair stores. The second landmark is Mostofi or Vanak big garden which is a park today and is known as an Iranian garden. Ghazi Saber shrine and Alzahra University are other landmarks of Vanak village neighborhood. The university is known in the city and even country; it introduces the Vanak village as a cultural neighborhood addition to historic neighborhood. Above places can play the role of elements of Iranian traditional neighborhoods such as school and mosque. So there is a potential of having a good relation between them by improving them and other urban elements.
Figure 4-33. Spatial structure of neighborhood (reference: author)
4-7. Analysis and conclusion

Vanak village is located in the region 3 of Tehran. This neighborhood has rural history. It is located in the legal range of the city during the physical development of Tehran and has turned into an urban neighborhood. Vanak village is one of the most important functional elements of area's spatial structure as a valuable rural context and has many natural and environmental features. Now, spatial and physical structure of neighborhood is a messy complex of many gardens, old buildings and aqueducts which are natural features of that. But inappropriate constructions, annoying land uses, huts and large number of immigrants have created an incongruous physical and social context. Therefore, in recent years the neighborhood and particularly the historic part of that, has gone to the social and physical exhaustion. This kind of exhaustion decreased the quality of residents' life. Today, we are faced with a neighborhood which is in priority of accordance, planning and development because of its natural and historic features. Thus, above studies will be analyzed by SWOT\textsuperscript{13} tables and then possibilities and limitations will be provided in order to provide recommendations for improving the quality of neighborhood's residents' life.

\textsuperscript{13} - A SWOT analysis (alternatively SWOT Matrix) is a structured planning method used to evaluate the strengths, weaknesses, opportunities, and threats involved in a project or in a business venture.
<table>
<thead>
<tr>
<th>S</th>
<th>W</th>
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<tbody>
<tr>
<td>• Antiquity of neighborhood</td>
<td>• development from rural context to urban context without planning</td>
<td>• preserve the historical elements and old context of neighborhood as a valuable complex of area and city</td>
<td>• Increase the number of old buildings during the time</td>
</tr>
<tr>
<td>• existence of historic elements such as Mostofi garden</td>
<td>• the absence of physical context integration</td>
<td>• improving the public spaces especially neighborhood centre</td>
<td>• negative effect of deteriorated buildings on the other buildings and residents</td>
</tr>
<tr>
<td>• existence of square as a public space and neighborhood's centre</td>
<td>• existence of abandoned buildings</td>
<td>• prevent from deterioration of buildings and destruction of gardens</td>
<td>• People's unwillingness to participate in space</td>
</tr>
<tr>
<td>• existence of gardens</td>
<td>• increasing the number of high buildings</td>
<td>• Avoiding to irregular constructions</td>
<td>• growth of visual disturbance</td>
</tr>
<tr>
<td>• Existence of preservable and restorable buildings</td>
<td>• the square is not surrounded as neighborhood centre</td>
<td>• increase in surrounding the neighborhood centre to attract people and improvement the social relations</td>
<td>• Destruction of open spaces and gardens</td>
</tr>
<tr>
<td></td>
<td>• low quality of life in deteriorated buildings</td>
<td>• renovation of buildings facades</td>
<td>• reduction of residents life quality</td>
</tr>
<tr>
<td></td>
<td>• dominance of mass on the space</td>
<td>• Reconstruction of deteriorated buildings</td>
<td>• increase in square's traffic because its irregular shape</td>
</tr>
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<td></td>
<td>• low value of buildings faces</td>
<td>• valuable architectural design for new buildings</td>
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<td>-------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------</td>
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<tr>
<td>• Existence of mixed uses</td>
<td>• Inappropriate location of some land uses such as car repair stores</td>
<td>• appropriate locating for car repair stores</td>
<td>• possibility of non-local people's presence in neighborhood to refer to the car repair stores</td>
</tr>
<tr>
<td>• Adjacency of land uses</td>
<td>• Shortage of parking, sport and health care centers</td>
<td>• Use wastelands to creating public parking and land uses such as local parks</td>
<td>• development of car repair stores</td>
</tr>
<tr>
<td>• Existence of recreational land uses such as Mostofi park</td>
<td>• Existence of lands and gardens without the use which are location of aggregation garbage and happening crimes</td>
<td>• Creating sport and health care centers in neighborhood</td>
<td>• ignoring the neighborhood's need to the public parking</td>
</tr>
<tr>
<td>• Existence of wastelands and green spaces</td>
<td>• lack of activities during the night</td>
<td>• Use recreational and commercial attractions of adjacent neighborhoods to context liveliness by link between existing elements</td>
<td></td>
</tr>
<tr>
<td>• Existence of university as an educational centre of city</td>
<td></td>
<td>• possibility of creating night activities</td>
<td></td>
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Table 4-6. Evaluation of land uses (reference: author)
<table>
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</thead>
<tbody>
<tr>
<td>• Existence of appropriate access network hierarchy</td>
<td>• The lack of appropriate balance between the neighborhood access network and access to the university</td>
<td>• definition of neighborhood identity by Chamran and Niyayesh highways, Sheikh Bahae and Molla Sadra streets (definition of neighborhood's border)</td>
<td>• traffic increasing particularly in routs which end in the neighborhood centre</td>
</tr>
<tr>
<td>• appropriate relation between access network and main arteries of city</td>
<td>• Existence of narrow roads especially in the old part of neighborhood</td>
<td>• creating the functional connection between the neighborhood centre and Sheikh Bahae square at the east of that to creation the liveliness</td>
<td>• increase in vehicles at the neighborhood centre</td>
</tr>
<tr>
<td>• Existence of ancient routs</td>
<td>• Existence of traffic node in the neighborhood centre</td>
<td>•Creating pedestrian paths</td>
<td>• lack of quick access to emergency services in the emergency situations</td>
</tr>
<tr>
<td>• quick access to the important parts of city</td>
<td>• narrow sidewalks</td>
<td>• preservation the ancient routs</td>
<td>• Possibility of increasing the general feeling of lack of safety in walking</td>
</tr>
<tr>
<td>• non-local vehicles don't pass the roads of old part because they are narrow</td>
<td>• Discontinuity of trails</td>
<td>• possibility of widening the roads</td>
<td></td>
</tr>
<tr>
<td>• short distance from residential parts to the neighborhood centre (easy supplying of daily needs)</td>
<td>• Interfere of vehicles and pedestrians</td>
<td>• improvement of ancient roads as a backbone of neighborhood</td>
<td></td>
</tr>
<tr>
<td>• good permeability</td>
<td>• Lack for pedestrian safety</td>
<td>• organizing of pedestrian paths and vehicles</td>
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<td></td>
<td></td>
<td>• organizing the university surrounding streets according to its trans-regional role</td>
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<td></td>
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<td>• improvement of paths which have potential of pedestrian way</td>
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Table 4-7. Evaluation of access (reference: author)
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<tbody>
<tr>
<td>• Existence of valuable architectural buildings</td>
<td>• Lack of utilization of valuable buildings architectural elements in new buildings</td>
<td>• possibility of beautiful and valuable furniture design</td>
<td>• increase in constructions and high buildings and blocking views</td>
</tr>
<tr>
<td>• Existence of gardens</td>
<td>• Lack of utilization of existing green space in landscape</td>
<td>• creating natural promenade by potential of existing green spaces(gardens)</td>
<td></td>
</tr>
<tr>
<td>• New designed buildings such as Molla Sadra shopping centre and the building in Mostofi garden</td>
<td>• existence of spoiled face of buildings</td>
<td>• possibility of flexible furniture design (Movable and portability in different times of day)</td>
<td>• rapid growth in the unused green spaces</td>
</tr>
<tr>
<td>• Diverse views of routs</td>
<td>• undesirable sky line</td>
<td>• possibility of harmonious panels design for commercial units n</td>
<td></td>
</tr>
<tr>
<td>• beautiful landscape because of alleys slope</td>
<td>• inappropriate location of urban furniture</td>
<td>• increase in visual values by creation and development of open spaces</td>
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<tr>
<td></td>
<td>• congestion of urban furniture</td>
<td>• using the slope in design to create diversity of landscape</td>
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<tr>
<td></td>
<td>• inappropriate and uncomfortable urban furniture</td>
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<td></td>
<td>• congestion of furniture is blocked pedestrian ways in some parts</td>
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<td></td>
<td>• visual disturbances of activities panels</td>
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<td></td>
<td>• Existence of urban facilities in unsuitable locations</td>
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Table 4-8. Evaluation of landscape (reference: author)
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<th>S</th>
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<tbody>
<tr>
<td>• Well-defined neighborhood with strong edges</td>
<td>• Existence of inflexible edges</td>
<td>• possibility of landmarks improvement particularly the university and its view</td>
<td></td>
</tr>
<tr>
<td>• Existence of strong routs as backbone of neighborhood</td>
<td>• there is not enough vision from all parts of neighborhood to the landmarks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Existence of defined nodes such as neighborhood centre</td>
<td>• the absence of valuable architectural landmarks (just have mental value)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Existence of valuable landmarks such as university</td>
<td>• neighborhood centre as a traffic node</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Existence of Iranian neighborhoods old and main elements such as mosque and school</td>
<td>• the absence of strong legibility</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• appropriate pattern of blocks in the south and east north of neighborhood</td>
<td>• the absence of regular blocks in the old part of neighborhood</td>
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<tr>
<td></td>
<td></td>
<td>• preservation of neighborhood's old and main elements</td>
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<td></td>
<td></td>
<td>• improvement of legibility</td>
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<tr>
<td></td>
<td></td>
<td>• General impression of residents about neighborhood's traffic centre</td>
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<tr>
<td></td>
<td></td>
<td>• possibility of legibility destruction</td>
<td></td>
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Table 4-9. Evaluation of spatial structure (reference: author)
CHAPTER 5: OBJECTIVES AND PRINCIPLES

5-1. Introduction

In this chapter after overall objectives, smaller objectives and principles which help us to achieve to thesis goals have been mentioned according to achieved information from studied neighborhood in chapter 4, evaluation tables and mentioned objectives in chapter 1. Proposed principles emphasize the physical and architectural features which are important factors in improvement of residents' life quality and are located in the revitalization method of intervention. They have been achieved in neighborhood analysis. This analyze is according to effective factors in improvement of neighborhood structure which mentioned in chapter 2.

5-2. Overall objectives

• Identification of physical effective factors to improve the neighborhood resident's quality of life.
• Improvement of neighborhood residents' life quality by using physical revitalization principles extracted from urban design.
• Neighborhood identity Revitalization by improvement of neighborhood's structure.

5-3. Smaller objectives

After describing the objectives, they came one step closer to implementation. In other words, minify the presented goals and presentations of operational objectives specify what principles and criteria can interfere in context?
Thus, small objectives to intervention in the Vanak village are as below:
• Preservation of historic and valuable buildings
• Creation the sense of belonging to the neighborhood for residents
• Revitalization the residents' social life
• Creation memories from public places
• Public spaces design and combination them with private spaces
• Providing architecture and urban design quality
• Creation an alive neighborhood
• Improvement the legibility of neighborhood
• Creation more safety and calm for residents
• Increase the people participation in urban spaces of neighborhood
• Increase the residents' monitoring space
• Reduce congestion
• Noise Reduction
• Possibility of presence various age and social groups
• Attention to human scale and creation surrounded spaces
• Creation local activities
• Traffic reduction
• Refusal to acceptance the strangers

5-4. Principles

After providing the smaller objectives, implementation principles must be determined to achieve these objectives. These principles are as below for studied neighborhood according to SWOT evaluation results and effective factors in improvement of neighborhood structure which mentioned in chapter 2.

• Public spaces design

• Creating active and alive social environment through mixing land uses

• Improvement of legibility by strengthening existing landmarks
• Creating the spatial diversity by use the static spaces and different levels of space
• Creating surrounded and human scale spaces

• Attention to the architectural style of valuable buildings and use them in design
• Creation intimacy and easy movement through creating good permeability

• Making small gardens and landscapes in front of the buildings.
• Existence of spatial hierarchies in access to different areas
• Creation of continuity and desirable skyline
• The perfect combination of masses to create desired shade
• use the prominences and indentations to windows or entrances definition for creating a sense of depth and stability
• Combination of volumes and creation interesting masses
• Appropriateness between buildings faces components (windows, etc)
• Creation pedestrian routes and its continuity

• Improvement of existing pedestrian's routes and its safety
• Creation multiple space centers (one main center and sub-centers) and suitable communication between them
• Separation the pedestrian paths and vehicle paths with respect to the pedestrians priority
• Use elements such as water, space and various details in landscape, for example in flooring
• Green spaces development
• Definition of commercial units in the ground floor and residential units in the higher floors to enhance the monitoring of space

![Diagram](image1)

• Use porch to ghosting, and creation an inviting sense of community center
• Use potentials of neighborhood, such as landscape and sloping lands in order to enhance the richness of sense
• Use appropriate and beautiful urban furniture space to create an attractive and comfortable space

![Diagram](image2)

• Use wastelands, ruined buildings and some changes in other buildings to turn them into publicparking by offering incentive policies.
• Remove the extra extensions from building facades
• Desirable and coordinated design of business units panels
• Change the function of neighborhood centre from a traffic node to an open and attractive space
• Maintaining the Vanak village square with emphasis on its physical and spatial aspects
• Use the open space (garden) at the south of square in order to development of square
• Creation a distinguished architecture and landscape at the neighborhood centre
• Creation active functions during the night
• Creation appropriate lighting at night to enhance security

• removing the noisy uses such as car repair stores
• Desirable entrance design for some special places to enhance the legibility

• Avoid designing unsafe corners and so surrounded alleys which are threat to security

5-5. Conclusion

Above principles provide effective intervention in the context. In fact, they make design frame work and are our guideline in urban design. They are extracted from studied area's analysis and are proposed according to connoisseurs' theories. They have been proposed for whole of neighborhood with the aim of life quality improvement. But there is an important space of neighborhood which is Vanak village square as its centre. As mentioned in chapter 2, neighborhood center plays main role in structure of neighborhood and it is a public space that makes residents' social and daily life. So attention to that and implementation the mentioned principles in this square as an important part of neighborhood can be a good example and practice in a smaller scale of design to physical revitalization of urban spaces. Alive neighborhood centre attracts residents to the space and gives them the sense of belonging to that. So it is possible in the next step to separate and select some principles to use them at a special part of area according to that part's features. It has been done in the next chapter on the neighborhood centre as a most important urban space of studied neighborhood.
CHAPTER 6: CONCLUSION AND POLICIES FORMULATION

6-1. Introduction

In this chapter has been tried to answer to the thesis questions and assumptions assessment which are described in the chapter 1 by using the principles which are mentioned in the last chapter and policies formulation for studied neighborhood centre as an important urban space that plays main role in residents' life quality. In addition neighborhood centre has been selected to assessment because of its main role in neighborhood structure, its social and economic life. Therefore, in this chapter design solutions, policies and criteria have been developed. Then design options have been proposed to organizing Vanak village square. After assessment them, the best of those has been selected and a plan is proposed for that based on selected organizing option.

6-2. Policies

Policies which are mentioned below are solutions which guide us to achieve the smaller objectives at the neighborhood centre. Thus, in this part they have been described according to each small objective to have a clear chart.

- Preservation of historic and valuable buildings
  - Restoration of historic buildings
  - Avoid inconsistent construction with the historic aspect of area
  - Attention to the valuable architectural in new constructions

- Creation the sense of belonging to the neighborhood for residents
  - Separation sensory between public and semi-public spaces
  - Creation common activities among residents in public spaces

- Revitalization the residents' social life
  - Space design as a communication node between residents
  - Predicting adequate space for parking
  - Creation appropriate access to the space
  - Creation locations to static activities such as sitting
  - Predicting adequate and comfortable urban furniture to stop
- Appropriate flooring to induction of motion and stop
- Improvement of activities and lighting at night to encourage the presence in the space at night

• Creation memories from public places
  - Improvement urban and social aspect of space
  - Creation a desirable landscape
  - Creation converged functions
  - Improvement neighborhood identity

• Public spaces design and combination them with private spaces
  - Using some ruined buildings or some existing open spaces to create public urban spaces. There is a garden at the south of Vanak village square that is a good potential to develop public urban space of neighborhood centre.
  - Creation semi-public spaces
  - Possibility of stop or sitting at the entrance of units
  - Existence of appropriate view from semi-public spaces to public spaces
  - Easy view from public spaces and difficult view to private spaces

• Providing architecture and urban design quality
  - Avoid without permission constructions
  - Using architectural elements models of historic and valuable buildings in new buildings
  - All buildings must have designed face
  - Organizing commercial units panels
  - Using horizontal and vertical elements in buildings' facade clearly
  - Coordinated and rhythmic communication between components of buildings' facade

• Creation an alive neighborhood
  - Using natural elements such as water and trees in landscape design
  - Predicting a space for peddlers
  - Improvement of night activities
  - Holding ceremony in different occasions
  - Improvement of space lighting at night

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• Improvement the legibility of neighborhood
  - Improvement of land marks such as university
  - Avoid increasing the high-rise constructions through the formulation of regulations on urban density
  - Small and local landmarks design such as water work, signs and kiosks
• Creation more safety and calm for residents
  - Creation separate paths for pedestrians and vehicles
  - Widening narrow and surrounded alleys
  - Consideration to continuity of pedestrians paths
• Increase the people participation in urban spaces of neighborhood
  - Creation a flexible space by movable urban furniture and different flooring
  - Possibility of space changes for multipurpose uses during different times
  - Creation social activities for residents
  - Improvement the pedestrians paths
• Increase the residents' monitoring space
  - Assign the second floor to residential users to increase in space monitoring by residents
  - Avoid dark and hidden corners design
  - Bright spaces design
  - Appropriate location of entrances
• Reduce congestion
  - Removing vehicles from square through changing the direction of ways which pass from there
  - Predicting public parking near the square
  - Avoid activities which attract non residents
• Noise Reduction
  - Removing noisy activities such as car repair
  - Reduction of vehicles noise by creation obstacle on the floor
  - Consideration to appropriate distance from main ways
• Possibility of presence various age and social groups
  - Creation possibility of children monitoring during their playing by adults
  - Creation required facilities for seniors
  - Predicting required facilities for young people gathering
  - Creation appropriate play ground for kids
  - Predicting appropriate locations for sitting and standing

• Attention to human scale and creation surrounded spaces
  - Using porticos and columns in ground floor in order to create visual continuity
    and cohesion as well as increase surrounded spaces
  - Modifying the sky line
  - Predicting appropriate closed space based on human perception
  - Physical or non physical definition of space borders
  - Space dimensions design according to human physical and psychological abilities

• Creation local activities
  - Predicting and improvement activities which provide daily and weekly
    requirements of residents

• Traffic reduction
  - Removing vehicles traffic through creation public parking or lateral roads
  - Change the kind of activities that are located at the roads which pass from
    square and their shape and width

• Refusal to acceptance the strangers
  - Defined but non attraction entrances design
  - Removing non local activities to prevent strangers presence
  - Improvement the relation of space and units that use it to be specified its users
6-3. Neighborhood centre's physical analysis

As mentioned above, Vanak village square which is neighborhood centre has been considered as a most important part of studied neighborhood to organizing according to mentioned policies to achieve objectives. Thus, physical analysis of this area is necessary for this purpose. Following image shows some information of square which help us to find best solutions to improve its quality.

![Physical Analysis of Vanak Village Square](image)

**Figure 6-1.** Neighborhood centre's physical analysis (reference: author)

6-4. Organizing options

According to overall physical analysis of neighborhood centre, organizing options of this part of studied area have been provided as below. Important and specific solutions have been described in each option to solve most important problems of neighborhood centre and to improve its effect on the residents' life quality.
- Square design just for pedestrians
- Rehabilitation of old northern-southern path by improvement of pedestrian movement between square and Mostofi garden
- Change vehicles access from eastern-western main road to secondary roads of neighborhood inside
- Switch car repair stores to appropriate activities for residential neighborhood

Figure 6-2. The first organizing option of neighborhood centre (reference: author)

- Southern garden is added to the square and both are used just for pedestrians
- Rehabilitation of old northern-southern path by improvement of pedestrian movement between square and Mostofi garden
- Change vehicles access from eastern-western main road to secondary roads of neighborhood inside
- Removed car repair stores

Figure 6-3. The second organizing option of neighborhood centre (reference: author)
6-4-1. Assessment of options

6-4-1-1. Assessment of first option

According to the first option, square is used just for pedestrians and vehicles cannot enter the neighborhood centre. Therefore, residents feel safe and neighborhood centre will attracts them and their social life will be improved. Rehabilitation of old path between the most important elements of neighborhood and creation residents required activities instead of car repair stores help to revitalization of neighborhood identity and will improve life quality beside other details which mentioned before. But it seems, residents will be faced with problem. Because change vehicles access from eastern-western main road to secondary roads of neighborhood inside, creates traffic jam inside the neighborhood and consequently neighborhood will be faced with congestion, noises and lack of safety for residents and all of those decrease life quality.
6-4-1-2. **Assessment of second option**

In this option, square will be developed by adding the southern garden in addition to first option solutions and car repair stores will be removed because to achieve greater space. To have a greater space that a big part of that is green attracts people more than before. Residents' presence makes them feel familiar with each other and help to create a community. Members of a community can solve many problems of neighborhood and decide how can improve life quality. In addition, residents' presence improves security because of their monitoring space. Also, they feel belonging to the space. So it can be a factor that creates alive space because of their participation in that. But still there is pervious option's problem about vehicles accesses. In the first opinion, it seems it is possible to solve that by some changes of neighborhood inside streets but with a closer look this result is obtained that many changes in the streets of old part, maybe affect the historic aspect of neighborhood negatively.

6-4-1-3. **Assessment of third option**

The big difference between this option and pervious options is presence of vehicles in the neighborhood centre. As mentioned before, currently square is a traffic node. There is congestion of vehicles and traffic jam is seen at the most times of day. So if we want to preserve their access to the neighborhood centre, we need to organize their movement through some physical changes such as modifying the geometrical shape of square and other details. In addition, to have residents' presence, southern garden has been preserved just for pedestrians like second option and ancient northern- southern path have been improved to walking between the neighborhood centre and Mostofi garden. Therefore in this case both vehicles and pedestrians can be safe at the space and social life, alive space and desirable activities are available.
6-4-2. Selected option

Comparison between above options helps us to select the best organizing option of neighborhood centre to achieve thesis objectives in a part of studied area. The applied process which used in this part can be usable for other parts of neighborhood and even for whole of that.

Figure 6-5. Selected organizing option of neighborhood centre
6-5. proposed plan

After choosing the best option, organizing plan of neighborhood centre is proposed with explain some of the most important points. The proposed plan for Vanak village neighborhood centre is as below.

Figure 6-6. Proposed plan of neighborhood centre

6-6. conclusion

Vanak village is a historical and cultural ancient neighborhood with residential dominant zone that its rural context affected by urban development in recent decades. So some parts of that grew and became new by new constructions and some older parts of that did not grow and even became weaker because of poor economic status of its residents and immigrants invasion. Organic and irregular growth of this part beside the renewal another part of neighborhood without any purpose, made problems such as small fragments, undesirable and tight accesses, narrow and illegible streets. Therefore there is not visual and physical cohesion. It should be noted that this neighborhood has
rich intellectual identity despite its considerable exhaustion and residents belong to that. Thus, its reconstruction and renewal is unacceptable. In fact, revitalization should be considered as a best intervention method in this area. According to this idea and with attention to the main goals, principles which are extracted from urban design process and theories that have been described in fifth chapter can be useful in all same neighborhoods. as mentioned before, these principles preserve neighborhood identity and improve residents' life quality through attract people to participate in neighborhood spaces and activities, removing social harms, organizing economic activities, making secure public places and reduction of environmental pollution. Each principle can be implemented by several policies according to features and problems of each part of area like proposed options and plan for neighborhood centre in this chapter. As mentioned before, neighborhood center is most important part of a neighborhood. Thus, if we can revitalize that, it can be revitalization of neighborhood heart and gives a new life to residents. It seems it is first step to revitalization of neighborhood to revitalize its centre because bulk of residents' social life takes place there. Consequently, revitalization of historic and ancient neighborhoods can improve residents' life quality and revitalize neighborhood identity. It is a process which started by identification and analysis the case study, compilation principles based on defined goals with attention to the urban design theories and finally compilation policies based on objectives.
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