REGENERATION THE STRUCTURE OF HISTORICAL CONTEXT WITH EMPHASIS ON IMPROVING THE QUALITY OF URBAN SPACE (CASE STUDY: THE HISTORICAL CONTEXT OF GORGAN)

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ABSTRACT

Urban historical contexts as national and cultural capital components, are not valuable only due to their collective memories and identifying our cities, but also considered as a residential area and livelihood of thousands of people. However, these contexts have some problems such as contextual dissociation, turmoil in the social and physical structures,…, which resulted in evacuation of original residents in the context. The present research tries to identify the relative basic axis and examine its possible application due to the promotion of environmental qualities, the cultural-social aspects of historical contexts or qualified by urban value, through investigating the affective elements on urban structure, the quality of environment, studying and recognizing positive and successful samples related to the revitalization of historical contexts, which have been done globally. Eventually, with emphasis on these criteria, presents suggestions and solutions in order to revive the structure of historical context of Gorgan. The applied approach in this study is analytical-descriptive, which its data has been gathered through field studies, library and documentary studies, and interview with residents. This research represents that criteria such as physical and functional links, spatial continuity, significant and memorial buildings, active edges, green space, mix use, walkability, hierarchy, identity and visual qualities can help the promotion of qualitative elements in urban spaces, and through which revival structure of context can be resulted.

Keywords: Regeneration, contextual structure, urban space, historical context of Gorgan
INTRODUCTION
In the past, urban contexts had a particular spatial organization. During recent decades, cross street plumbings had resulted in disruption of previous spatial organization, consequently caused the disruption of social organization and the creation of separate zones. However, such contexts will be able to act more efficiently comparing to new urban contexts, and express civil life very well, through regeneration proceedings. Many researches have been done in this field, such as Mousavi (1988). In his thesis, he has tried to search for solutions to promote environmental qualities of historical core of Gorgan; restoration the old governmental citadel complex, including Green Square, artillery and forum, via an analytical method based on urban design viewpoints.[1] Furthermore, Hashemnia (2010) has studied the disruption in contextual spatial structure, destruction of restricted physical identity; which resulted in disruption of continuous social structure, relations and interactions decrease among residents. Results of his research shows that, the improvement of area physical structure may cause in incidence of social interactions and qualitative promotion of life style by people living in the neighborhood sociably, economically, and environmentally. [2] Shokuhi(2009), believes that urban structure is resulted by combining two different structural forms: organic context and plaid context, which because of checker board network creation, organic context has tolerated some irregularities and changes by performance. In this research, intellectual understanding of people is measured by using mental plans of area users, through different techniques.[3] Regarding the stated samples, it can be concluded that a lot of studies have been done in the field of historical contexts, but not particularly on the revitalization of historical contextual structure of Gorgan, as an ancient civilization that qualified by unique cultural, physical and functional structures, which have been emphasized in this research.

Urban structure
Robert Cowan defines urban structure as: urban structure is a framework which represents way of connection, development of roads and open spaces comparing to each other. The possibility of comparing in the sense of urban contextual graining. The main urban structure means the pattern or arrangement of development blocks, streets, buildings, open spaces and urban landscape which create urban environments/places. There are mutual connections among all of
these elements, which together create a place. Urban structure does not belong to any special kind of urbanism. This term is used for all the concepts of city center, suburbs, and areas which located between them. Also it is applicable for concepts of city, town and village.[4]

**Affective agents in creating urban structure**

The movement framework

Mixing uses

Density, facilities, form

Energy and resource efficiency

Landscape

**Landmarks, vistas and focal points**

Blocks

Parcels & plots [5]

The main structural components of the city are as follow:

1-physical components

Physical parts and elements

Location in city

Physical structure

Urban context

Roads and access network

Green and open space

2-Functional components

Functional components

Composition and proximity of functions

Population and activity concentrations

3-visual and spatial components

Landmarks, significant elements and symbolic network

Views and landscapes

Spatial qualities (spatial stability, space contrast, legibility, identity, proportions,..)

4-Harmony of physical forms, activities and spaces [6]

**Urban spaces**

Urban space is a part of city which has a social environment, including a set of interactions among people in order to exchange energy, information, goods, materials, rumors,..., visit each other, gather and form different kinds of social cohesions: then, urban space is the basic element in urban structure which is related to the heart and focus of social solutions. [7] Existed layers in urban areas can be divided into two groups of physical and social layers:

**Physical layers**

This element can be observed and touched in city physically and structurally/ by form. [8] Buildings are the most important constitutional physical components in urban spaces; and their shape model, volumetric composition, and method of building façade influence the structure of urban space and people perception of city. [9]

In fact, what is called public realm (urban space), practically enclosed by private realm elements, i.e. private buildings, and their
designs could not be done with denying the design characteristics of private buildings, which construct the edges of such spaces.[10]

Social layers
It is including activities as variable elements, and civil life as sustainable elements:

A-activity: most of human activities appeared necessarily in space. Generally, urban activity system is the most important aspect, the character element and the content of urban space. [7]

B-civil life: in recognizing the concept of life as sustainable element in urban space, the focus is on the set of scanning, trends and attitudes which are based on collective rationality, democratic believes, rationalism self-esteem and law abiding. therefore, urban space is such a public space including symbols which are the factors of sustainability of collective and civil values and beliefs, that involves the historical cultural heritage of society; and since social capacities have a historical dimension and related to collective and durable values created by people during the time and transferred through cultural symbolic elements, so the content of urban space includes historical and more sustainable elements. By more sustainable elements, it means the set of qualities and abilities through which urban space gains it in terms of the history of rich and cultural heritage and collective values by society; and show it in its spatial-physical symbols and also transfer it to next generation. Then, in this viewpoint urban space is considered as relatively more sustainable system in transferring cultural heritage of society [7].

Spatial organization theories
Ragers Transic’s triple theories, in the field of urban spatial organization provide an appropriate condition for comprehensive recognition and evaluation of public realm in old urban contexts. These three theories, according to Roger Transic’s statement, are planned based on gradual evolution in modern space and historical sites analysis. The urban form, the starting point of these three theories, is related to the way of building locations, as urban masses which is enclosing the space in the public areas of the city; and the figure–ground plan as a simple tool in analyzing the urban public domain, allow to percept the structure and physical of this place. On the other hand, systematic organization and identification of communications, or a network makes it possible to understand the coordination between physical, spatial and functional forms based on Connection Theory. Finally, dedicating the place theory to this network gives it meta-physical concept richness, and
regards it as a necessity to understand the field due to preserve and reinforce the concept of place, particularly intervention in the case of historical context range.

1-Figure- Ground theory (mass and space): as mentioned, this theory is the starting point of understanding urban form, which is the analyzing connection between construction volumes and open spaces. This theory analysis’s is a strong means in identifying context and urban contexts patterns, and also including matters related to spatial arrangement/system that can be resulted in two-dimensional and static sense of space.

2-connection theory: the sources of this theory are the lines which connect one element to the other. These lines have been formed by streets, walkways, linear open spaces and other connecting elements, which link different parts of city to each other physically. This theory tries to organize a system or a network of connections, which create a structure for spatial arrangement.

3-place theory: this theory by adding elements of human, cultural, historical needs and natural field to physical discussions, go beyond the two stated theories, and says awareness of the importance of historical, cultural and social values in urban open space is necessary and complementary to physical discussions. Each of these theories has their special values, and through analysis, including physical and un-physical aspects of urban contextual structure, can organize the researches and studies in different dimensions of public domain network, particularly in historical contexts [11].

**Environment quality**

Environment quality is a multi dimensional concept, that has some common concepts as life quality, place quality, citizen perception, satisfaction and livability, such that in most cases are regarded as similar concepts. A qualified residential area induce a sense of welfare and satisfaction to citizens, through
physical, social or symbolic characteristics. [12] David Kanter one of the pioneers in architecture cognitive studies and urban design, has presented components of urban environment quality via a famous model as “place model”, which constituted of three physical, active and semantic dimensions.

<table>
<thead>
<tr>
<th>theorist</th>
<th>Title of book or article</th>
<th>Qualitative components</th>
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</thead>
<tbody>
<tr>
<td>Michael South worth</td>
<td>Theory and practice of contemporary urban design</td>
<td>• structure &lt;br&gt; • legibility &lt;br&gt; • form &lt;br&gt; • Sense of place &lt;br&gt; • identity &lt;br&gt; • views and landscapes &lt;br&gt; • w human scale or walking scale</td>
</tr>
<tr>
<td>John Punter and Matthew Carmona</td>
<td>The design dimension of Planning</td>
<td>• environmental sustainability quality &lt;br&gt; • Landscape quality &lt;br&gt; • Views quality &lt;br&gt; • City Form quality &lt;br&gt; • The quality of building form &lt;br&gt; • Public area quality</td>
</tr>
<tr>
<td>sitePPS (Project For Public Spaces)</td>
<td>Resulted by studying over 1000 pieces of urban public space in different countries</td>
<td>• access and connection &lt;br&gt; • comfort and image &lt;br&gt; • sociability &lt;br&gt; • pleasant establishment of activities</td>
</tr>
<tr>
<td>Matthew Carmona and Associates</td>
<td>Public places-urban spaces</td>
<td>• access &lt;br&gt; • Hard space and soft space &lt;br&gt; • Public space &lt;br&gt; • Security and safety &lt;br&gt; • Urban landscape &lt;br&gt; • Mix and destiny &lt;br&gt; • Entire inclusiveness &lt;br&gt; • Time management of space</td>
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**Urban regeneration approach**

The process of urban regeneration which in 1990s afterwards had been transformed to a dominant movement in urban intervention, actually was a moderate movement between renovation and urban conservation; in which preservation of old values, reuse of buildings and valuable contexts, renovating the life in urban physical and old contexts, were the most dominant proceedings in this period. Furthermore, we can consider parts which need to be renovated. [13]

Practically, urban regeneration applies a combination of approaches, and don’t put the town in a rigid and inflexible framework. Also, urban regeneration seeks to reach financial and economical progresses, new dimensions of civil life and social freedoms, simultaneously. [14]

On one hand, increasing perception of art, culture and free time have been transformed to an important component of urban regeneration; on the other hand, dissemination of views in case of...
preservation economical value has caused particular approaches in field of urban regeneration both practically and theoretically. During this period, cultural and protection policy developed and transformed to an important component of physical and economical solutions in revitalizing many Western Europe cities. In other words, it can be said that from 1980s afterwards, cultural interventions were more to be the stimulators than the second production of economical growth. The final goal was to upgrade and enhance the quality of urban life, through improving and developing unique features of a place and its people. Applying different aspects of urban culture like art, sports and training, both as affective means to regenerate stagnant areas and as intrinsic goals, have widely presented in western countries to regenerate projects during the last decade.[13]

Different approaches of urban regeneration

Regarding the existed potentials in the context and place, and also available goals behind these interventions, urban regeneration approach can be divided into four different styles; Culture-based regeneration, regeneration based on design, regeneration according to social groups and also regeneration based on preservation. Based on experiences during two recent decades in this regard, we can consider seven basic principles in successful urban adjustments and regeneration. These principles are as follows:

1-improving use variety
2-encouraging density
3-creating density development
4-confidence of balanced activities
5-enhancing ease of access
6-creating functional links
7-constructing a positive identifying system

Table 2: The basic principles for reform and urban regeneration [15]

<table>
<thead>
<tr>
<th>General principles for adjusting and urban regeneration</th>
<th>Noticeable criteria in designing</th>
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<tbody>
<tr>
<td>Improvement of landuse variety</td>
<td>Mix use</td>
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<tr>
<td></td>
<td>• Improvement of night activities and 24-hour activities</td>
</tr>
<tr>
<td></td>
<td>• Integrated Public infrastructure development</td>
</tr>
<tr>
<td></td>
<td>• The connection of bazaar with public infrastructure and moving walk pattern</td>
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<tr>
<td>compactness encouragement</td>
<td>Filling physical distances</td>
</tr>
<tr>
<td></td>
<td>• Lasting attractive population applications and public spaces</td>
</tr>
<tr>
<td></td>
<td>• Encouraging and sustaining walk movement in order to encourage compactness and communication</td>
</tr>
<tr>
<td>Creating density of development</td>
<td>Noticing to the effect of large scale projects</td>
</tr>
<tr>
<td></td>
<td>• Protecting available capitals</td>
</tr>
<tr>
<td></td>
<td>• Attention to the attraction of the main wall shells</td>
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<td></td>
<td>• Break large masses</td>
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</table>
Global experiences

Studying the global experiences is one of the important parts in any research. Definitely, global urban design researches are not exceptional. Examining the experiences help the designer to percept the matter and take optimal solutions due to solve the problem. In this part/stage, it is trying to investigate the experiences and researches have been done in the field of historical contexts intervention.

Table 1: Summary of global experience

<table>
<thead>
<tr>
<th>Name of project</th>
<th>Significant point in studying the case study</th>
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<tbody>
<tr>
<td>Dystlry area</td>
<td>• Reinforcing complex local-historical identity&lt;br&gt;• Reusing of historical buildings and rehabilitation their functions&lt;br&gt;• Using of consistent elements and furniture with characteristics&lt;br&gt;• Promoting environmental qualities in order to increase presence&lt;br&gt; • Management and attention to civil life</td>
</tr>
<tr>
<td>Brvzy – Prtvla area</td>
<td>• Reinforcing historical-local identity&lt;br&gt;• Reusing historical buildings and their functional revival&lt;br&gt;• Promoting environment qualities in order to increase the presence of people</td>
</tr>
<tr>
<td>Old neighborhood</td>
<td>• Creating spatial fluid quality through incorporating uses&lt;br&gt;• Designing public park-city and garden&lt;br&gt;• Creating greenhouses and glass walls. Open ways and spaces&lt;br&gt;• Creating continuous ways with their landmarks in the floor level&lt;br&gt;• Transforming present enclosed station to an open and vast area&lt;br&gt;• Accessibility quality to the environment by parking lots&lt;br&gt;• Designing vertical accessibility system by vertical elevators&lt;br&gt;• Constructing botanical museum. Botanic gardens museum. Restoration of school</td>
</tr>
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</table>

THE SCOPE OF CASE STUDY

The historical texture of Gorgan located in an area which had been enclosed with walls, towers and gates by the beginning of present century. The extent of this area is over 150 hectares. Neglecting some parts of city context located in the mentioned area, which as a result of destruction and separation of
enclosed gardens of Qajar have a new form and checker board network, regular graining of land pieces and setting system is about 60 percent, yet it is possible to recognize fields possess organic form of old context with structure and structure according to environmental, climate, ownership and cultural requirements. Some parts of central context of city which qualified by fantastic spatial and physical values and show neighborhood identity as social-physical cores in urbanity system and also urbanization of ancient Iran in city of Gorgan. SARCHESHME neighborhood, Naalbandan, Pasarv, Darb-e-no, Meydan, Sarpir, Mikhch-e-garan, Shirkosh, Bagh-e-shah, Bagh-palang, Shazd-e-Ghasem and finally Mirkarim are remained spaces from old urbanism in Gorgan.

It is in this area that old bazaars and city service centers such as Naalbandan and Meydan bazaars, service-commercial axis of Khomeyni street in two directions of East-West of the old context, have been located; and regarding available required infrastructure facilities (except acceptable and pleasant access system), yet it is possible to consider contextual service potentials, comparing to the whole of city, as a positive point and in order to development. [16]

STUDYING THE MAIN structure AND SPATIAL organization OF OLD CONTEXT OF GORGAN (FROM QAJAR PERIOD to THE CONTEMPORARY era)

In area studying and morphology, that’s known as historical context of Gorgan and indeed is the main core in forming the city of Gorgan, three major periods are recognizable in terms of important physical, social and historical developments and changes. These three distinguished periods, which has their own particular features and characteristics, can be classified as follows:

First period: from the beginning of urbanism formation in Gorgan by the end of QHAJAR period

Urban spatial system, in this period, suggested a proportional distribution and composition of population and their way of locating in residential spaces in the form of neighborhoods, numerous passages, local-urban-regional service spaces (in local scale), which through social communication networks formed a continuous complex, and all of its elements had a hierarchical system that were responsible for actual and natural needs of their time.
Second period: since the beginning of Pahlavi period by the middle of 1340s

The second period was started by rising of Pahlavi dynasty, simultaneously. This period had followed by basic changes in political, social, economical and finally physical structures of country domiciles. At first, construction of a network of streets with new characteristics that resulted in destruction of a part of the context and its division into some separate parts; also spaces with new applications and proportional to political, economical and official conditions had been created in the context. Secondly, these interventions had changed the spatial organization, existed cohesion in all of the context and specially available road network; furthermore, changes in the way of using lands damaged the balance in the composition and distribution of different application levels, and practically arteries and new zones attracted the major part of civil life; this period should be considered as starting of exhaustion of historical context and old core of city, since afterwards the context has enclosed within newly constructed streets.
Third period: from the mid-1340 to the present

Third period is regarded as the intensification of changes and transformations which had been occurred by the rise of Rezakhan, in a period which gradually the effects and results of land reform have been appeared simultaneously. One important result of such reformation was the increasing immigrations of villages to cities, effects of which have been lasted in city of Gorgan up to the present time in different physical, economical and social aspects.

Traffic network in old context

Totally, Cruciate surgeries of first period of Pahlavi, damaged the identity and physical urban complexes, badly. A lot of buildings and valuable areas of activity have been damaged during such proceedings, and their identity has been changed. Also, the old context of Gorgan was not exceptional. The urban major traffic arteries generally pass through the old context. Construction of mentioned streets in spite of accrued disadvantages, partly equipped the old contextual area. However totally saying, dissociation of these street plumbing and consequently numerous numbers of alleys which derived by the entrance street, caused traffic into the context in different orientations.

Variant applications of context centers

Such spaces have two major characteristics: 1-the possibility of aggregation, 2-the possibility of public traffic in terms of integrity with the whole system of open public spaces. Their open areas are used in order to plying, visiting, religious ceremonies,…; like Naalbandan Bazaar which is used as a place for daily market and booth sales. The main and dominant
application of these spaces includes religion, small commercial, and residency.

Figure 5: social, cultural and religious centers and ways in context

Figure 6: Historical sites and memorable context centers

Form and Internal system of Urban spaces in old context

Old context’s squares are included as close and enclosed squares. Generally, their total form is square quadrilateral to rectangular. However, irregularity, fracture and deviation in one of their sides are observable (samples such as Naalbandan and Sarcheshme Takaya are exceptional, due to their close square form). Buildings and structures around it are of the same value. The open space is not dominated by any building or structure. These spaces don’t have a central element. Trees are located by the side separately and have a symbolic role.

Figure 7: The morphology of old context neighborhoods.
Affective components on context regeneration

Generally, the affective components on structural regeneration can be divided into physical, functional and spatial-visual components. These components included the following criteria:

- Physical and functional linkage
- Spatial continuity
- Memorial and significant buildings
- Active edges
- Mix using
- Walkability
- Hierarchy
- Identity
- Visual qualities

Solutions to redefine contextual structure of historical context of Gorgan

In redefining the contextual structure, attention to internal cohesion of communication structure, density preservation and existed enclosure, definition of small scales projects in order to promote urban spaces qualities, and increasing the connection between context and its surrounding area and city, are particularly necessary. The presented solutions can be classified in 5 groups/classes:

1-Redefinition of tourism-historical-cultural and religious system in historical context of Gorgan

Creating trans-regional and urban scale tourism spaces, with regarding the identity and historical structure of neighborhood, and its available capacities

Creating visual attraction and legibility with the definition of tourism way and side walk in the direction that including signs and historical memorials/monuments like minarets, historical houses

Distinguishing the floor constructions of mourning routs in the context

Reviving the old Mayamey Hotel as a perceptual sign in order to more perception of context legibility

Revitalizing the concepts of movement, centers and areas with old structures (based on cities in Qajari period)

2-Redefining symbolic foundation of the context in Qajar period

Reviving the historical passage, the link between Sabz-e-mashhad neighborhood and city park, through tourism activities and retailing

Preserving and promoting natural structures and ecologic signs located in the context area like city park, Russian garden.

Reinforcement and connection of public areas: Imam street, Shahrdari square, Mazandaran, Meydan crossroads with neighborhood centers through revitalization of their historical axis
Changing function of historical school of Emadiye to a cultural-educational center
Creating the Russian garden as a sport and leisure space and temporary exhibition of cultural-artful productions
3-Reviving the available social places in the structure of context
Definition of a continuous network of walking ways in order to link the social places (neighborhood centers, local parks, Takaya) and required uses of neighborhood.
Definition of gate patterns both in area scale as main entrances to the context, and in lower scales in internal blocks and in different physical forms
Reviving existed Takaya in the area (local squares) as active public domain
Reinforcing the social cohesion and social communications through reviving the cultural structure of context
4-internal structure cohesion of neighborhoods
Functional transformation of Qajar Arg`s military function to leisure-recreation function
Integrating of social places to sport spaces
Development of parks and sport and urban spaces in the context
Creating a strong communication between elements and urban valuable areas in order to their visual and functional flourishing
5-promoting the quality of urban spaces
Including the collection of small scale projects in order to promote vitality, increase social connections, enhance the awareness and mutual respect by all the residents in the context. Some functional solutions are listed below:

Identity
Reviving the aqueduct rout and shed/trill the water there, in historical routs and planting trees in the vicinity of it, in order to motivate and revive the context
Promoting the spatial quality through existence of styles and spaces belonged to different periods, along with special unity derived from their continuity

Vitality
Equipping neighborhood centers to hold informal exhibitions, or weekly markets to buy and sell household and local products, in order to of increasing social interactions and enhancing the sense of belonging
Transpiring colporteurs and vendors from entries, in terms of providing proper facilities to locate them in daily markets or places with high traffic
Perform public arts pointing to historical background and environmental values existed in contextual culture

Permeability
Emphasizing on entries to historical area
Legibility
Physical signing of context and reinforcing the significant points in the context
Reviving symbolic building such as Amirlatifi and Shirangi houses,… through proper functional definition for them
Show/perform urban/civil signs/symbols and elements through controlling building density in the context, particularly in the main physical area

Security
Establishing security in the neighborhood by destroying undefended spaces , and creating social monitoring

Climate welfare
Preserving valuable trees in order to ecologic quality and enclosure in human scale
Using traditional methods, like wooden balcony and porch in old bazaar rout, to shading and prevention rain fall
Improving the passages quality (promotion of paving, vegetation, city furniture,....)
Using covered passage pattern and corner architecture in neighborhood entries in order to emphasize on entrance feature
Using valuable physical and architectural features existed in the context to determine some cases as houses entries, buildings density in land, semi-open spaces (balcony) and open space to promote identity stability in new designs.

CONCLUSION
Outcomes resulted by this research show that, historical urban contexts, which have been tolerated spatial discretions from Pahlavi period, are extremely required to be revived. Historical context of Gorgan is not exceptional; meanwhile urban spaces in local scales, activity and functional node and existed axis’s in historical context of Gorgan possess features which will be resulted in creating a cohesive network structure that is qualified by valuable activities; and provides context unity and integrity. In order to achieve this unity, presented solutions in this research have been totally suggested in 5 redefinition of tourism-historical-cultural and religious network, context symbolic foundation in Qajar period, revitalizing social places in the contextual structure, internal structure cohesion in neighborhoods and promoting urban spaces quality, all of which have a key role to historical context structure regeneration in this city.

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