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# Study of Postwar Reconstruction of Jamaleh Quarter in Isfahan

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### Abstract

Isfahan is one of the most beautiful cities in the world, with unique residential quarters of old age and unique beauty. One of such ancient districts is a quarter called "Dardasht", which is of a great historical value and hosts Jamaleh quarter. This area, which has an invaluable historical texture, was attacked and damaged by Iraqi missiles and bombs during Iran-Iraq 8-year war and was then rebuilt. The reconstruction program was conducted in Jamaleh with the aim of rehabilitating the quarter using theoretical foundations consistent with the principles of traditional architecture, and was expected to be proved as a successful example, but failed to succeed in the implementation of the project, and the output of this reconstruction project represents a different face of native architecture based on the principles of Iranian architecture and the lives of residents. As a result, the texture underwent unexpected systemic, social and economic changes. This article, extracted from the writer's master's thesis in this regard, aims at examining theories and the process of rebuilding invaluable historical textures and extracting lessons from it.

The method of analysis in this paper is qualitative and descriptive-analytical, but the use of statistical data (if necessary) has also been used to prove the hypotheses. After reviewing the views on the reconstruction and extraction of indicators, they are measured against the situation in Jamaleh quarter so that it can be determined whether the implementation of the reconstruction was consistent with the theoretical foundations. Finally, theoretical and statistical analyses have been used to prove the hypothesis and to answer the research questions.

The results of this study suggest that what is being discussed in the theoretical framework of this project is very different from what was expected after thirty years, and that the goals contemplated were not achieved. At the time this paper was being written, further studies indicated that in ancient cities, interference with the historical context is, for any reason, very important and critical. Officials and planners need to be familiar with various aspects of intervention and rehabilitation in ancient textures with a comprehensive and profound viewpoint. Having a proper theoretical framework and plan and implementing it properly makes the reconstruction very effective, leading either to the rehabilitation or destruction of a quarter, just as what happened to Jamaleh quarter of Isfahan. Despite the appropriate framework and theoretical foundations, after about thirty years from the rebuilding of the quarter, none of the principles of the reconstruction plan can be seen today.

Keywords: Post-war reconstruction, Ancient texture, Native architectural principles, Isfahan,

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### Jamaleh quarter.

### Introduction

As one of the most important historical cities of the world, Isfahan has a school of urbanism and special architectural principles. Most of them are the same formed by the Qajar era -by the time the striking transformations of the First Pahlavi dynasty has not begun- as the ancient texture. This part, the old texture, is actually the inner part of the city (Tavasoli, 1993).

Dardasht is one of the most important and oldest quarters of the city, consisting in its turn of smaller quarters including Jamaleh, which faces many problems today. In the course of the imposed war, the area was targeted by bombs and missiles and its historical texture incurred damages. This research tries to identify Jamaleh quarter and the post-war reconstruction in it and to examine, after around 30 years from the reconstruction of the quarter, that whether theoretical principles have been taken into account in accordance with what has been contemplated by reconstructionists (the necessity to continue architecture with the indigenous values of this land), and to state the current situation of the quarter with regard to the objectives stated in the reconstruction plan by examining the changes.

The research process begins with studying the characteristics of Jamaleh quarter in Isfahan and reconstruction therein. Then, the current status of the Jamaleh quarter is studied being by field surveys, observing existing evidence, interviewing and using a questionnaire with authorities and citizens across Jamaleh quarter. In the end, answers are given to the questions raised, the hypotheses are evaluated, and suggestions are provided for solving existing problems.

In this paper, extracted from a master's thesis, effort is made to present to the reader a summary of the most important results in the form of a short article. Hence, the details are commonly required to be mentioned in theses, especially in relation to the method of research and how to extract the research indicators, and the reader is referred to the text of the

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thesis. But in this article, after the research question is expressed, the questions and research hypotheses on which it is based are introduced. In the following, by describing the history of the subject, the research methodology will be presented and based on the research method, the information is analyzed and the research findings are introduced.

### Problem statement and research questions

A quarter like the old quarter of Jamaleh, with no body and texture, has a soul in the quarter, depending on the traditional principles of living in quarters. These principles are the same as those that are manifested in the body and tissue. After serious damage was induced to Jamaleh quarter during the imposed war, interference in an old texture and its reconstruction has apparently been made regardless of the spirit of the quarter and without proper recognition of it and a good understanding of elements and components, and its effects on the body and tissue of the quarter is not perceived correctly to help rebuild the texture. Hence, applying changes regardless of the principles governing the lives of the people in the quarter brought about results that greatly affected the lives of the residents, leading to the decline of the quarter. Perhaps the limitations and regulations on rehabilitation, the lack of knowledge of planners, designers and administrators, or in general, practitioners unfamiliar to the area, hastiness, the lack of proper materials or skilled people in the construction have affected the situation in the same way as it affected the rehabilitation of the old texture of Dezful (Shahrokhian, 2009). Each of these factors can destroy the historical texture. As a result, these items should be considered as good reconstruction indicators, and based on them, the rehabilitation of Jamaleh quarter should be considered.

Accordingly, the main question of this research refers to the process of rehabilitation of Jamaleh quarter and sub-questions can also be raised as follows: On what theoretical framework is the rehabilitation of Jamaleh quarter based? And is the result of the rehabilitation of Jamaleh quarter consistent with the theoretical framework of rehabilitation planners?

In response to the research question, the hypothesis is that it seems the result of the rehabilitation of Jamaleh quarter is not consistent with what was considered by the rehabilitation practitioners as the theoretical framework.

### **Research Method**

This methodology is based on the qualitative approach and in terms of the type, it is regarded descriptive-analytic; however, statistical and quantitative analyses have been used whenever the obtained quantitative data and its analysis helped further the research.

The method of collecting information is through the study of documents, search in the Internet and governmental as well as nongovernmental organizations and institutions. Moreover, field studies and survey methods were used through questionnaires, observations, and in-depth interviews with people, authorities, governmental and nongovernmental practitioners and organizations, councils, associations and cooperatives and active labor units.

### **Background of the research**

One of the studies that has been carried out in the context of evaluating and criticizing post-war reconstruction in the old textures is the study by Shahrokhian titled "The Study of the Systemic Effects of the Post-War Reconstruction Program on Social Change in the Dezful Ancient Texture". The researcher has shown on the study of rehabilitation in this study that the unfamiliarity of decision-makers in the reconstruction of the old texture and the lack of proper basic ideas for planning reconstruction during the war, which has been performed hastily for whatever reason, with emphasis and focus on the physical output reduces the desire of the indigenous inhabitants for the old textures and replaces the non-native ones with them, causing social problems and the loss of the prosperity and life of a quarter (Shahrokhian, 2009).

Studies have been done so far on Jamalah quarter, some of which referring to Isfahan architectural indices as the principles used in rehabilitation. The principle of privacy and being free of exposure, compatibility and adjacency of activities and functions, use of maximum factors and characteristics of the natural environment, dynamics of spaces (Rashtian, 2001), are some of the cases which have been referred to as the basic principles of architecture of Isfahan. Reconstruction is also contemplated. Researchers who have studied the rehabilitation activity in this area point to the need to preserve the past signs and the social and cultural spirit of the quarter in explaining the reason and the way of reconstruction. Khodabakhshi explains the reconstruction and improvement of the quarter as follows:

Restoration and renovation of valuable historical monuments is performed through considering traditional architecture to protect cultural identity, linking new ways of life with the structure of the old texture, improving the quality of life by preserving authenticity of the past and solving social problems, strengthening economic prosperity through enabling quarter shopping centers (Bazarcheh), creating cultural and educational applications to raise awareness of residents (Khodabakhshi, 2001). Considering the reasons raised by the researchers and what is mentioned in the booklet on the renovation of the Jamaleh quarter as a document for the reconstruction of the quarter, which was published by the Housing and Urban Development Organization in 1993, addressing the improvement of the historical textures, is the originality and identity hidden under the old crust of these quarters for urban communities and contemporary generations (Housing and Urban Development, Isfahan, 1993). Thus, it is seen that those involved in reconstruction believed in the richness of this historical texture. Historical texture has a specific structure and pattern.

They adhered to the principles of the past and historical architecture, and tried to avoid the modern day crisis manifested in modern architecture. According to their claims, the aim of the implementation of the plan to improve and revive the historical context is to coordinate the establishment of the new conditions of urban life and the possibility of providing new services (Isfahan Housing and Urban Planning, 1993: 20) required by the textures. The greater the contribution of historical textures in current activities, the more likely they will be to survive (Zangi Abadi and Soltani, 2007).

Researchers who have studied the quarter have pointed out that these goals have not been realized in the implementation and outcome. Various cases have been cited as the causes of this disorder. The researchers believed that, although the main goal of the Jamaleh quarter project was to reach a modern quarter along with preserving its past values, the plan would not be fruitful even at this level, and the work would be abandoned or diverted amid the route (Vafi, 2009: 109). This deviation from the main route and the landscape designed for the context of Jamaleh and its inhabitants created problems that have been studied in the form of indicators as a case study. General indicators such as the adaptation of the new texture to environmental conditions, and so on are the most important items that have often been referred to. According to the researchers, in terms of urban texture and construction, the old texture of the Jamaleh quarter in Isfahan has been more adapted to the climate of Isfahan (Ghaleh Noei and Asadi, 2013).

In most studies, the logic of texture formation is referred to as the primary policy. It has been argued that interference with the traditional textures of cities such as Isfahan eliminates the hierarchical structure of these tissues regardless of the logic behind the formation of these textures (Esmailian and Pour Jafar, 2012). This is the same subject as considered by the designers of Jamaleh quarter reconstruction, but the results of the research show that the outcome of the failure to observe the native architecture (Iranian Islamic models); (Kazemi Nia, 2014).

### Necessity and Innovation of the Study

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Since the ancient textures and constructions are national capital, preserving them is the protection of the ancient national heritage and the identity of the people of the community. Given the threats of these textures in terms of aging and numerous natural threats such as earthquakes and floods, and man-made threats such as war and terrorist clashes, it is necessary to recognize these textures and try to maintain them by having operational plans to protect them against various threats based on state-of-the-art knowledge and theoretical foundations. Also, having a program for timely and correct reconstruction after incidents is something that should always be considered by designers, architects and authorities.

Today, due to the ever-increasing advances in the knowledge of the reconstruction, these discussions are examined from the perspective of various researchers, and studies that have been done are instrumental in the production of reconstruction knowledge. However, in most researches, mainly the result of the reconstruction work is desirable, while in the present study, we have tried to take a deep look at the theoretical framework of reconstruction, and then measure the operations and results of work in accordance with the theoretical point of view proposed by the planners of reconstruction operations.

### **Theoretical framework**

Given the subject of this research, reconstruction theories are examined from different perspectives in order to reach a theoretical framework appropriate to this research.

Reconstruction theories from the view of discontinuity or new life:

Is it war and destruction that have caused the historical discontinuity of the city and villages or is it only a stage that accelerates this historical continuity (Kopp & et al, 1982). This view arises from the fact that although, as a result of incident-made disaster, it seems that everything is gone and the life of that area is declining, it is seen that the ancient cities, which have had a great boom from the past, are located

in disaster-prone areas that have suffered repeated earthquakes, floods and volcanoes but have survived and shined more (Shahrokhian, 2009).

Reconstruction theories as the view of opportunity or disaster:

Whether to view accidents as opportunities or disasters and the associated reconstruction ensuing such incidents points to the fact that in dealing with such a situation, if the disaster is regarded as a catastrophe, with an approach emanating from being shocked, efforts will be made to recover the situation. In such a situation, recovery is usually regarded negative and as a task imposed on the program. In the case of proper planning, the disadvantages and defects of the past can be rectified by viewing the incident as an opportunity; however, given the time constraints in reconstruction and in abnormal conditions, the situation seems to be seems to be problematic, especially in the perspective of turning threats to opportunities towards development that is mostly impossible (Shahrokhian, 2009).

Reconstruction theories as the view of emphasis, waiver and combination:

At restoration, any action that takes place will be in one of the following three concepts compared to the past (Kopp & et al, 1982).

1. Reconstruction is the precise repetition of the past and all-round emphasis on rebuilding the past.

2.Reconstruction is a complete model transformation against body, concepts and social, cultural and environmental values of the past.

3.Reconstruction is linking the past with the present and the modernization of the former body and in fact a combination of the first and second modes.

Given the approaches m entioned in terms of reconstruction and theories of other researchers, as mentioned in the research background (literature), given what is mentioned in the Jamaleh quarter reconstructions booklet, the theoretical framework of the planners of the reconstruction of the Jamaleh quarter in Isfahan can be the fact that renovation and revitalization, especially in historical textures, are heavily influenced by the historical past and the patterns and principl es of traditional architecture and urban development. Without appreciating these and that historical past, it would seem that any move would be inappropriat e, irrational, and illogical. Here, any line, bound ary, and constraint is of a meaning reason and logic.

Regarding the improvement and preparation of the implementation plan, the historical understanding and the above princip les are the most important factors(Housing and Urban Development of Isfahan, 1993). According to this claim, it can be found out that the theoretical foundations for the reconstruction and revitalization of the Jamaleh quarter is the use of historical princip les for to make contemporary the former body. Theo reticians and planners of the rehabilitation of Jamaleh have harbored the combination-oriented rehabilitation as discussed.

Regarding what was me ntioned in view of the historical patterns in planning for reconstruction, it is imperative to first consider the historical patterns of the quarter in or der to be able to extract the indices for measuring the implementation or non-implementation of the ideas through this recognition and to analyze the results after about thirty years. The historical pattern of architecture followed by Jamaleh and Isfahan is derived from the school of Isfahan. The urban development of Isfahan mainly occurred during the Safavid period when the school of Isfahan was born in architecture and urban development (Habibi, 1996).

The purpose of the school of Isfahan, which is outside the scope of this article, is to realize the principle of balance, spatial-physical balance, coherence, and coordination of the contradictory elements (Ibid). The reconstruction theoreticians in Jamaleh have tried to preserve the historical past and the above principles through updating the facilities of the quarter including the possibility of car traffic in the texture.

# Introduction of Jamaleh and the description of the reconstruction and its results

Dardasht quarter hosting Jamaleh as its part has a

primary nucleus that was formed during the Seljuk era and was completed during Safavid era (Esmailian and Pour Jafar, 2013). Jamaleh quarter is located in a distance of five hundred meters southwest of Isfahan mosque and north of Jamaloddin Abdul Razaq Street, which has special values of symbols such as architecture, urban development, public buildings, residential texture, passageways and communication paths, marketplaces, and public and private spaces. You can hardly find a quarter with all such urban facilities (Fig1).

The main axis of Jamaleh starts at Haj Mohammad

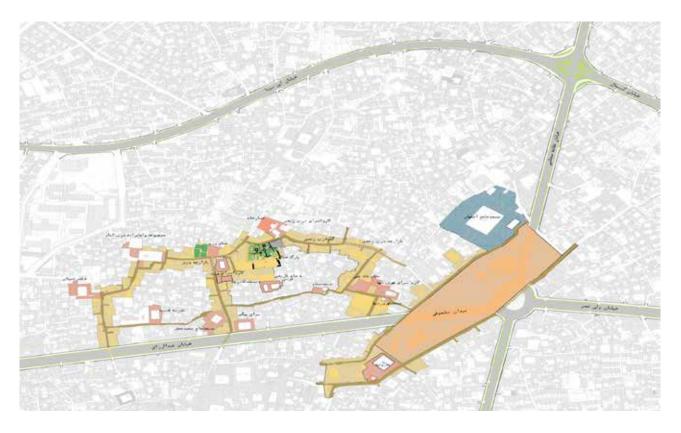


Fig.1. Location of Jamaleh quarter in Isfahan, Source: modernization and improvement organization of Isfahan.

Ja'far market and reaches Jamilan palace by passing Vazir bath and the tomb of Imam Zadeh, and then reaches Shah Ali bath and Imam Ali Square by passing through the passages inside the quarter.

Within the direction of this axis, which starts from Abd al-Razaq St., Jamala Alley, one can see outstanding elements including Shah Ali Bath, Chain Door Caravanserai, Old Woman Mosque, Jamaleh Green Space Park, Vazir Bath (now used as the center for the intellectual development of children), Haj Mohammad Ja'far Abadeh'i market, which ultimately leads to Abd al-Razaq Street in front of the market and Nim Avar school.

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### War and rehabilitation in the Jamaleh quarter

After the consecutive bombings of the city of Esfahan in 1986 during the imposed war followed by multiple rocket attacks in the following year and the widened range of destruction, needs were felt to scrutiny and adoption of executive measures for improvement of the valuable and historical texture of the quarters more than before. Thus, after review and coordination, the General Department of Housing and Urban Development of Isfahan Province decided to participate actively in the first historically valuable quarter of the city, and by approving the scope of the action at the meeting dated 16/12/1987 of the Commission on Article 5 of the

Law of establishing the Council of Urban Planning and Architecture of Iran in the quarter of Jamaleh, it established the historical texture office and the utilized efficient technical forces in it (Housing and Urban Development of Isfahan, 1993).

The executive work in Jamaleh quarter of Isfahan started in 1988 with the aim of reviving the quarter. But this project was abandoned half-finished and was not completed.

Here, it is worth referring to the second reconstruction to improve the situation of the quarter. This project was carried out by Isfahan Maskan Sazan. The project began in October 2008, with a total length of 650 meters, an arc of 50 meters, 50 meters long, and trunk of 550 meters. During surveys and considering urban design issues, the main access to the quarter, which had been emphasized in the detailed plan, was studied, leading to the extension of a passage with different widths of 2.5 to 4 meters, and width of 5 meters.

## **Evaluation of rehabilitation of Jamaleh quarter** with respect to indicators

In this research, in order to achieve the indicators of historical patterns, theories of theorists such as Professor Pirnia and Dr. Habibi on the Iranian architectural patterns and the principles of the architecture of the school of Isfahan (Habibi, 1996) were used. In addition, Delphi method was used to extract main indicators for evaluating the reconstruction of Jamaleh quarter in Isfahan. In the remainder of the study, the information obtained in various ways was measured with these indicators.

Due to the multiplicity of indicators, here are just

some of them that include several sub-indicators. Such indicators are confidentiality and introversion, taking into accounts the climate, indigenous materials, system and dynamics, sense of location, proportions, environmental adaptation, constraints, justice, and security. Given the current situation in the Jamaleh quarter and the content of interviews, these indicators have almost disappeared and have been replaced by the principles of urban development and modern architecture, so that there is no difference between a quarter located in a much less ancient city and what is seen in the Jamaleh quarter.

## Statistical analysis

Regarding the non-observance of the native architectural model (the theoretical framework for the reconstruction of the Jamaleh quarter), statistical analysis of the questionnaires distributed to current residents and the residents who left Jamaleh quarter after the reconstruction is shown below:

Chi-square method was used; the summarized results of test significance are given in Fig. 1.

According to chi square value chi-square = 9.88, there is a significant difference between observed frequency and that expected based on the significance level less than 0.01. The difference between these two ratios is statistically significant and the assumption of the research is confirmed. That is, the architectural (native) pattern has not been taken into account in the reconstruction of Jamaleh quarter of Isfahan (Fig2).

### **Theoretical analysis**

Regarding what comes from the documents and information, the reconstruction performed does not

significance level	Degrees of freedom	Chi-square
0/007	2	9/80

Fig2. The significant results of chi-square, Source: authors.

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comply with the theoretical foundations, and the result of the reconstruction reveals signs different from the initial goals and thoughts after about thirty years. The contradiction of reconstruction with the principles that designers and executives contemplated have led to the unwillingness of indigenous residents and their departure from the quarter and the emergence of numerous social problems none of which had been seen before the reconstruction, proving the failure of the reconstruction according to the theoretical framework in mind.

Despite the theoretical framework for reconstructing Jamaleh quarter tried to preserve values and monuments in addition to adding new facilities to the quarter, but at the stage of the implementation, factors such as constructing numerous streets, hasty construction and deconstruction of houses destroyed by the strike of the missiles and bombs instead of reconstructing them and some similar cases imply that modern architectural theories are images, and there is no sign of using historical patterns. This ultimately led to some results different from those expected by theorists. As seen in the illustrations, nothing remains from the glorious Jamaleh texture but a series of half-ruined houses and a quarter with many social problems. During the reconstruction process in this quarter, plans in mind were not implemented for some reasons despite the proper theoretical framework. In addition to losi ng the historical identity and texture of the past, the new facilities did not fit well into the quarter, resulting in

another challenge. Due to the theoretical frameworks examined in the field of reconstruction knowledge, turning threats into opportunities should not pose other problems (Figs 3 to 6).

With regard to the above indicators and observations and interviews, almost none of them have been



Fig.3. New homes in the vicinity of the historic texture of Jamale, Source: authors.



Fig.4. Abandoned homes in Jamaleh quarter which have become the garbage dump, Source: authors.



Fig.5. Historical destroyed homes in Jamaleh quarter, Source: authors.

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Fig 6. Open spaces that have been transformed into parking spaces in Jamaleh quarter, Source: authors.

observed. And exposed houses and the destruction of a systematic texture that has a dynamic is one of the most common challenges in the texture of Jamaleh quarter today.

### Conclusion

What happened according to the theoretical framework in the reconstruction of Jamaleh quarter has brought about different results and what is happening in the quarter over the years is different with the goals mentioned in the theoretical framework of the plan. Not only the rehabilitation program has failed to reconstruct the primary urban spaces and improve the quality of life, but it has caused many problems for its inhabitants. Of course, as mentioned above, a comprehensive attention has been paid to various topics in the quarter in the theoretical foundations. But the result is not proportional to these policies, and further research is required to identify whether it resulted from inappropriate implementation or other factors. Deep but precise examination of a particular topic or part of it can reduce the likelihood of errors, as it now becomes clear that although the theoretical foundations and decision framework for the reconstruction of the Jamaleh quarter of Isfahan seemed to be correct, the result was undesirable in practice. So, very detailed studies should have been done in this regard on how to apply the correct theory in practice.

It is suggested that, considering the value of historical textures and threats striking them on the other hand, planning be made to rebuild and improve these textures, so that, if necessary, the lack of opportunities or similar reasons do not result in the destruction of the texture. Preparation of strategic plans as well as multidimensional maps derived from strategic plans can be very helpful in this regard.

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