

Developing a Framework for Qualitative Evaluation of Urban Interventions in Iranian Historical Cores

Azadeh Arjomand Kermani Delft University of Technology, Faculty of Architecture and the Built Environment, Department of Urbanism



Design: Sirene Ontwerpers, Rotterdam

Cover image: Kerman 1957 (National Cartographic Centre)

ISBN 978-94-6186-684-4 ISSN 2212-3202

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Developing a Framework for Qualitative Evaluation of Urban Interventions in Iranian Historical Cores

Proefschrift

ter verkrijging van de graad van doctor
aan de Technische Universiteit Delft,
op gezag van de Rector Magnificus prof. ir. K.C.A.M. Luyben,
voorzitter van het College voor Promoties,
in het openbaar te verdedigen op vrijdag 24 juni 2016 om 10:00 uur
door Azadeh ARJOMAND KERMANI
Master of Science in Architecture Engineering
Art University of Tehran, Tehran, Iran
geboren te Kerman, Iran

Dit proefschrift is goedgekeurd door de

promotoren: Prof.ir. E.A.] Luiten and Prof.dr.ir. P.H. Meurs

Samenstelling promotiecommissie bestaat uit

Rector Magnificus, voorzitter
Prof.ir. E.A.] Luiten, promotor
Prof.dr.ir. P.H. Meurs promotor

Onafhankelijke leden

Dr. A.R. Roders Technische Universiteit Eindhoven

Prof.dr. T. Atabaki. Universiteit Leiden

Prof. J. Pendlebury

Prof. V. Nadin

Prof.dr.ing. C.M. Hein

Newcastle upon Tyne University

Technische Universiteit Delft

Technische Universiteit Delft

Prof.dr. W.A.M. Zonneveld Technische Universiteit Delft, reservelid

To my teachers and all those who have inspired my love of learning, above all are my parents

Preface

"When compared with ancient cities that have acquired the patina of life, our modern attempts to create cities artificially are, from a human point of view, entirely unsuccessful." [Christopher Alexander]

Having studied at the Art University of Isfahan, located in a number of restored historic houses spread out over the old city, I always noticed a special feeling and sense in historic neighbourhoods. This atmosphere is missing in newly built areas and towns. In the academic environment of my education, spatial transformation and architectural change were considered the main threat towards heritage. The main discussion concerned the preservation of historic monuments, legitimised by their age and ornamentation. This insight settled in my mind (and heart): that we must protect our old monuments and cities from transformation no matter the costs and consequences.

After graduation I worked in an urban consultancy for a few years, doing feasibility, economic and social studies on Iranian cities. This work made me realise that a well-balanced combination of heritage preservation and spatial development is necessary for a vital city and community. Unfortunately, there has not been sufficient research on Iranian historic urban cores from this point of view. The available research reports were either focusing on historical value of the area, defending a critical position towards the new development, or analysing the area from a completely functional and programmatic point of view (economic and housing capacity) and ignoring the historical value of the area.

I started working on this subject in order to reveal a potential balance between heritage management and urban design. Living and studying in the Netherlands I was confronted with a more dynamic and optimistic approach towards heritage (the so-called Belvedere concept: preservation through development). This provided an interesting and exotic point of view to me as an outsider. The opportunity that I saw was to bridge this Belvedere experience with the Iranian practice of urban revitalisation projects. Gradually the challenge became clear: selection, explanation and evaluation of urban projects (reported all in Farsi) to Anglophonic scholars and practitioners and bring in contemporary western concepts on urban heritage management and urban design to Iranian academia. The results of this PhD-research can support a wider view on urban design in a heritage context. It offers vocabulary and methodology and will therefore ground and reinforce the analysis and evaluation of urban redevelopment projects in Iran. Hopefully it also nourishes the professional debate on the future of the outstanding urban heritage conditions that my home country has to offer. Having said that, this dissertation cannot be considered more than a first step in investigating a vast and complicated field of research.

Working on this research has been a truly life changing experience for me and its successful completion was not possible without the immense contributions of many kind people. I am deeply indebted to all of them for their intellectual and/or emotional support.

I am sincerely grateful to my promoters Prof. Eric Luiten and Prof. Paul Meurs. Eric, I am very thankful for all the time and effort you invested in guidance of my work from the beginning. Your encouragement and your admirable kindness throughout these years helped me to grow as a researcher but also as a person. Paul, I value your keen perception of the broader research picture with which you guided me back on track during times I got lost in unnecessary details.

I am also very grateful to the committee members, Prof. Touraj Atabaki, Prof. John Pendlebury, Prof. Carola Hein, Prof. Vincent Nadin, Dr. Ana Roders and Prof. Wil Zonneveld for their critical comments to this manuscript and their willingness to be part of the promotion committee. I would like to single out Prof. Vincent Nadin for giving me the opportunity to extend my research interest in heritage under his supervision. Vincent, thank you for your insight in planning, your encouragement and the fruitful brainstorming sessions we had.

I have received generous support from many people in the Urbanism department as well as Design & History group. I am very grateful to Dr. Ana Maria Fernandez Maldonado, Dr. Akkie van Nes and Dr. Frank van der Hoeven for their help and support in different phases of my research. I want to also thank my colleagues Wout van der Toorn Vrijthoff, Gerdy Verschuure-Stuip and Loes Veldpaus for our helpful discussions and inspiring chats. I also want to thank our kind secretaries in Urbanism department: Amber, Astrid, Karin, Margo, Danielle, Linda and Annemieke for all their help and support during last years. I am greatly thankful to Vero Crickx for her patience and support during the time consuming printing process of this book.

I was lucky to share my office with a large number of colleagues during the last years due to the flexible working space policy of the department. I was also honoured to receive a considerable amount of support from my friends in other departments. Among them I like to mention Mohammad, Babak, Nurul, Marta, Nasibeh, Fatemeh, Ceren, Yuting and Jiaxiu. Mohammad, thank you for all the comfort and help you gave me during the last hectic and stressed months.

Many thanks go also to my other friends all around the world. Behnaz, I am sincerely thankful for your kindness during the first year of my stay in Delft. Alieh, thank you for all the long walks we had to clear our minds from negative thoughts. Noushin, I thank you for all the help, support and time you invested in me, I am very lucky to have you as a friend. Raha, thank you for all the confidence you support me with. Laleh, I thank you for always being ready to grab a coffee and share your thoughts with me.

Pooria, I enjoyed our heated discussions about society, politics and even sport. Anty, thank you for all the encouragement and support you gave me. I also want to thank Danial, Carsten, Narges, Mahdieh, Hoda, Elham, Leila, Willem and his scientist friends, Nassim, Miguel&Eva, Nicolle, Arash, Sima, Alireza&Armaghan, Nafiseh&Dariush, Shiva&Alwin, Mahshid, Farid, Mark, Etienne, Jacolien and all my friends in the Yoroshi group for the fun outside university at gatherings, barbecues and birthday parties. I am also greatly indebted to Kazem Dadkhah and Mohammad Foroutan for helping me in gathering data and information on one of my case studies and to Parisa for hosting me during my field works in Shiraz.

My heartfelt and deepest appreciation goes to my family. I would like to remember my father who has always been and still continues being my source of life and courage. My maman, I am deeply indebted for your loving care and your unconditional support of all my endeavours, even if they take me far from home. I want to thank my sisters and brother and my lovely nephews and nieces in Iran for their emotional support and being there for me whenever I need them. I would like to express my gratitude to my parents-in law, Evert and Anja, for providing me a warm family environment in The Netherlands.

I owe my deepest gratitude to my love and my best friend Gerard. Thank you, Gerard, for enriching my life with your energy and enthusiasm, your strong belief in me and also your endless encouragement throughout the last stressful year of long working hours. Words cannot describe how lucky I am to have you in my life. You has selflessly given more to me than I ever could have asked for.

Azadeh Arjomand Kermani

Delft, May 2016

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Summary

Iranian historic city cores are important parts of modern cities because of their valuable monuments and morphology but are also significant because of their population density, location and the major governmental functions they house. Since 1920, modernisation policies and urban development trends in Iran have justified spatial transformation and redevelopment and the demolition and destruction of traditional urban fabrics as a way to provide contemporary requirements and hygiene improvements for the residents. As the UNESCO recommendation on the Historic Urban Landscape argues, historic urban cores can only sustain their role in the daily life of the city by getting prepared for and participating in this transformation process.

Disagreement over the value of historic urban cores on the one hand and inevitable modification of urban areas in a developing country like Iran on the other, creates a problematic condition for the preservation of the historic environment. The Valletta Principles for the Safeguarding and Management of Historic Cities, Towns and Urban Areas states that historic towns and urban areas require an integrated approach including their "protection, conservation, enhancement and management as well as their coherent development and their harmonious adaptation to contemporary life". In order to support the process of reaching a balance between these spatial targets in Iran, this research discusses the relation between urban transformation projects and their heritage context. In doing so it connects international literature on urban quality and traditional Iranian urban forms to contemporary Iranian urban design practice.

To achieve this integration between urban heritage and spatial development, a framework of quality attributes has been developed to evaluate urban interventions in a heritage context. The three main pillars of this framework have been extracted from and inspired by international literature and guidelines. Place-making theories have proved to be especially helpful. An analysis of traditional urban forms in Iran and their main characteristics - especially for the urban type of the bazaar – has provided a list of specific and relevant parameters. The framework has been tested by evaluating two case studies in Shiraz that illustrate two different approaches to heritage intervention on an urban level. The outcome has led to modification of the framework and new research questions.

TOC

Samenvatting

Iraanse historische stadskernen zijn essentiële onderdelen van moderne steden vanwege hun waardevolle monumenten en morfologie, maar zijn ook belangrijk vanwege hun bevolkingsdichtheid, locatie en de belangrijke overheidsfuncties die ze in hun historische omgeving huisvesten. Sinds 1920 hebben modernisatiebeleid en trends op het gebied van stedelijke ontwikkeling de transformatie en daarmee de vernieling van traditioneel stedelijk weefsel gerechtvaardigd, met als doel het voldoen aan actuele wensen en het verbeteren van hygiëne van bewoners. Volgens de UNESCO Recommendation on the Historic Urban Landscape kunnen historische stadskernen hun rol in het dagelijks leven van de stad slechts behouden door geïntegreerd te worden in het transformatieproces.

Verschil van mening over de waarde van historische stadskernen enerzijds en onvermijdelijke stedelijke ontwikkeling in een ontwikkelingsland als Iran anderzijds, resulteren in een problematische situatie voor de historische omgeving. De Valletta Principes (Valetta Principles for the Safeguarding and Management of Historic Cities, Towns and Urban Areas) definiëren de bescherming van historische dorpen en stedelijke gebieden als een geïntegreerde aanpak die "bescherming, conservering, aanpassing en management evenals samenhangende ontwikkeling en harmonieuze aanpassing aan het huidige leven" omvat.

Om een balans te vinden tussen deze invalshoeken in Iran, beschouwt dit onderzoek de relatie tussen stedelijke ontwikkelingsprojecten en hun erfgoedcontext. Dit onderzoek overbrugt de kloof tussen internationale literatuur en traditionele stedelijke vormen in Iran enerzijds en huidige ervaringen met stedenbouwkundige ontwikkeling in de Iraanse erfgoedcontext anderzijds.

Om tot integratie van stedelijk erfgoed en ruimtelijke ontwikkeling te komen, is een kader met kenmerken ontwikkeld waarin stedenbouwkundige ingrepen in erfgoedcontext geëvalueerd kunnen worden. De drie pijlers waarop dit kader is gebaseerd zijn gedestilleerd uit en geïnspireerd op internationale literatuur en richtlijnen, in het bijzonder theorieën op het gebied van "place-making". Parallel hieraan zijn traditionele Iraanse stedelijke vormen en hun specifieke kenmerken onderzocht, in het bijzonder de bazaar, waaruit vervolgens een lijst van relevante eigenschappen is opgesteld. Dit evaluatiekader is vervolgens getest door toepassing op twee concrete projecten (case studies) in Shiraz (Iran), welke gekenmerkt worden door een verschillende aanpak ten aanzien van interventie op stedelijk niveau. De uitkomsten van deze fase van het onderzoek hebben geleid tot verbetering van het kader en het opstellen van aanvullende onderzoeksvragen.

1 Introduction

§ 1.1 General Introduction

From a heritage related point of view, historical Iranian cities are significant not only because of their population density and location, but also because of the major functions of the central buildings that are very often historical monuments and valuable urban ensembles (Kermani and Luiten 2010). Their spatial structure is a product of the gradual interaction between characteristics of the physical environment, continuous human adaptation and application of settlement strategies and building material over many centuries. In this respect old urban ensembles manifest the national as well as local culture of their residents. Gradual and adaptive transformation has enhanced continuity and cohesion even in the context of large-scale interventions carried out by rulers. Pre-1920 Iranian cities were characterised by the central position of the Friday mosque, the bazaar, public baths and other institutions, located mostly in the very centre of the city. Surrounding these public structures were the residential areas divided into quarters and often distinguished by ethnic separation. The rich lived, in general, in or near the centre of the city, while the poor and the non-Muslims lived either in separate quarters or on the fringes of the city.

§ 1.2 Problem Definition

In the early twentieth century, accelerated modernisation created significant changes in attitudes and approaches in many fields, including urbanism, which upset traditional patterns, both physically as well as socially. Since then there has been a tension between the old and the new, struggles over continuity and change and a battle between tradition and modernity (Izadi 2008). Modern ways of thinking ignored the value of historical structures and justified their destruction as a way to provide contemporary requirements and hygiene improvements for the residents. Modernism, with its vision of the city as a machine, with its parts separated by function, became highly influential. Also a new group, traffic planners, came gradually on to the scene with their ideas and theories on how to ensure the best conditions for urban mobility, mainly for car traffic. Neither the city planners nor the traffic planners put an explicit

focus on the quality of historical urban space and traditional city life high on the agenda.

As a result of the focus on quantity, on uniform solutions, on the repetitiveness of architectural prototypes and on top-down concepts of urban improvement, an alternative approach began to grow. It questioned the results of modernisation. This approach argued that society cannot live without the material and narrative remnants of its past and that old cities convey a valuable collection of monuments and ideas which form the identity of that society (Karimi 1998). This approach has brought a new concept into the realm of planned urban transformation: heritage conservation. The historical environment has been dealing on the one hand with conservation of historical monuments by concentrating on absolute protection and listing of monuments, and on the other hand with extreme and technology driven modernisation and development which is mainly concerned with population growth and the physical expansion of cities. Disagreement over the value of historical environments created a wide range of approaches to deal with the decline of historical cities as well as to develop new urban areas, making the situation more problematic for urban cores.

It is essential to find a way to make these two different approaches supportive of each other especially in a developing country like Iran. Urban population growth from 1925 until now has been rapid, including significant rural-urban migration which has increased the development pressure on historical cities. According to the first national Iranian census in 1956, the number of Iranian cities was 199 and the urban population made up 31% of the total population. In 2006, the number of cities had increased to 1012 and the percentage of urban population exceeded 70% (Farhoudi, Shahraki et al. 2009, Iranian-Statistic-Centre 2009). During these years, the population of Iran has experienced a three-fold increase (from 19 to 60 million) while urban populations have undergone six-fold growth (from 6 million to 36 million). The urban population in Iran will reach 80% in 2020 according to the United Nations. Large urban centres such as Tehran, Isfahan, Mashhad and Shiraz are experiencing changing urban growth processes, leading a transition from compact to dispersed forms. They are sprawling rapidly, which can result in historical urban cores becoming obsolete.

The flourishing oil-based economy also encouraged and enabled agencies to construct large scale development projects to address the housing needs created by this overflowing urban population. These large-scale development projects resulted in functional and spatial fragmentation of the historical structure of cities. It also affected their social and economic structure and intensified the problems of these areas. Large scale projects such as these are mainly dependent on public money. The lack of financial resources because of low oil prices and the foreign debt of the government results in the implementation of these projects being suspended. The vacant properties

and cleared areas for these projects are left behind and become crime havens which make life harder for the remaining inhabitants due to unsafe living conditions.

The other significant destruction of historical urban fabric is concentrated around religious centres which are mainly situated in the historical cores. These redevelopment programmes are initiated by religious institutes and charity foundations due to their financial and legal power after the Islamic revolution in 1979. The large-scale transformation and enlargement of holy shrines in various Iranian cities resulted in the destruction of many historical residential areas in cities such as Mashhad, Qom and Shiraz. The valuable historical urban structure of Iranian cities on the one hand and the powerful development pressure on historical cities in the last century on the other, makes Iran a very interesting field to study interventions in a heritage context. Large-scale physical interventions are still the dominant approach when dealing with historical districts in Iran, however during the last decade there has been a shift towards integrated and decentralised policies resulting in a series of locally based projects across the country. A limited number of studies have been undertaken highlighting physical transformations and the forces behind them (Mozayeni 1974, Hodjat 1996, Karimi 1998, Madanipour 2006, Izadi 2008, Sharifi and Murayama 2013). Nevertheless, qualitative evaluation of these transformations and the definition of relevant parameters for urban interventions in Iranian historical cores have not been investigated. Most of the literature on the historical context of Iran are either carried out in the pre-revolutionary period by foreign scholars explaining the history of Iranian cities (Lockhart 1939, Rotblat 1975, Wilber 1975, Lawless 1980), their geography and formation (Kheirabadi 1991, Habibi 1996, Pourjafar, Amini et al. 2014), or have mainly been focused on the history of modernisation policies before the revolution (Boyle 1978, Abrahamian 1982, Adelkhah 1999, Ashraf 1999, Ardalan 2000).

The production of urban knowledge especially at the international level is generally low. Universities and consultants play a marginal role in developing urban knowledge because of a missing link between research and practice. Even though Iran has been experiencing modernisation policies and development policies in its historical cities for almost a century, the international knowledge on urban transformation and development policies in post-revolutionary Iran is very limited due to the country's political position towards western countries and international organisations.

There is a need for a systematic study to investigate new urban interventions in Iranian historical conditions and evaluate the quality of their designs in regard to their heritage context. A combined analysis of the process and the product will draw a complete picture, offer deeper insights and provide a better understanding of urban interventions in the Iranian heritage context. This holistic study should consider design processes and analyse and assess the final quality of designs. In order to do so, a set of evaluation criteria is needed. A number of qualitative parameters have been developed at an international level by various scholars. However, these parameters have been mainly

developed for an American and European context and may not be suitable for the Iranian situation. A set of applicable criteria for the Iranian heritage context should be developed based on traditional Iranian urban forms and characteristics, taking the international concepts and guidelines into account.

§ 1.3 Research Aims and Questions

Even though the functional, cultural and physical qualities of historical Iranian cities are subject to great change and often deterioration, they still play an important role in the social life of their inhabitants. They define their collective identity and place attachment. Most new redevelopment projects however tend to ignore this sense of place. They provoke a spatial as well as a social and functional break with their context.

The main aim of this research is to develop specific parameters and evaluation criteria derived from and applicable to old Iranian cities. They should reveal the relation between (re)development projects in Iran and their heritage context. The focus of this research is on the design process and not on policy making in this respect. In order to develop a set of suitable parameters for Iranian conditions, these parameters and attributes should be derived from traditional urban forms and should be aimed at supporting urban designers in reaching a balance between urban transformation and heritage preservation.

To achieve this aim, this study delivers an in-depth investigation at a national level to clarify and identify the major approaches of the heritage management regime in current Iran. A set of guidelines and strategies are extracted from academic studies and literature on both heritage studies and urban design. Traditional Iranian urban forms have been studied to provide tools for the qualitative analysis and study of urban interventions. At the same time practical issues are considered in order to make the research outcomes usable for practitioners and urban designers in Iran. Therefore, the main objectives of this research are to explore the various trends in urban transformation of Iranian cities and to develop a framework of relevant quality attributes for urban intervention in an Iranian heritage context, testing and modifying the framework by evaluating different projects in historical urban cores and analysing their impacts and outcomes.

This research creates insight into urban intervention approaches in historical Iranian cities and provides a deeper insight and better understanding of these cities and their problems and finally, presents these results to an international audience. In addition, value is created for the national audience: by looking at the new trends of intervention

in the heritage context as well as urban design criteria at an international level, this research also aims to promote a better understanding and awareness for Iranian actors and scholars.

Rephrasing the research objectives into questions helps to have a better understanding of the type of information needed in this research. Moreover, it is believed that defining the research questions is the most important step to be taken in a research study. The form of the questions provides an important clue regarding the appropriate research strategy to be used (Mason 2002, Yin 2003). From the main objectives of this study, the following major research questions arise

Q1 What are the characteristics of urban heritage and its preservation in Iran?

Q2 What are the parameters to form a quality framework that can help us to evaluate the urban interventions in the Iranian urban historical environment?

Q3 What are recent design approaches in historical city cores in Iran and what can be learned from them?

However before answering these questions, It is essential to:

- First, define the current situation of historical urban cores in Iranian development strategies.
- Second, define urban heritage, urban development and recent approaches towards them
- Third, define urban quality criteria to evaluate recent urban interventions.

§ 1.4 Research Method

As discussed in the previous section, the main goal of this research is to develop a framework of parameters and quality attributes derived from and therefore suitable for Iranian conditions, to evaluate urban design interventions in a heritage context. In social and urban studies both qualitative and quantitative methods are used and depending on the research questions and the nature of the research, the most suitable method should be chosen. Having access to certain types of data and information also plays an important role in choosing the suitable methodology. Limited available quantitative data on Iranian urban heritage preservation and lack of financial and administrative transparency limited the main focus of this research to a qualitative methodology in evaluation of urban interventions. Furthermore, qualitative research

places emphasis on the subjective nature of the research and on understanding its complex interrelationships. Stake believes that qualitative research considers interpretation of events and seeks to clarify multiple critical factors affecting the phenomenon (Stake 1995). Neuman describes this "interpretive approach" as a systematic analysis of social actions through the direct observation of people and places which helps to understand how people create and maintain their social life (Neuman 2006, p 58).

Historical cores are identified in this research as a significant Iranian heritage context considering the development pressure they face and the tangible and intangible heritage they contain. Moreover, urban cores are usually located in the most significant part of the city in terms of activities and centrality, playing a significant role in every society's urban identity. The historical cores of towns and cities provide a "historical embedded identity" and their role in promoting sense of place is also undeniable (Kotkin 1999). At the same time, "old cores are not capable of accommodating the requirements of contemporary life since they were generated by social and environmental circumstances that are different from those that prevail today" (Kermani and Luiten 2010, p 81).

In order to evaluate the impacts and assess the results of various programmes in this context, a framework of quality parameters and attributes has been developed. Iranian historical urban cores are chosen as a testing ground for analysis and evaluation of the interaction between urban (re)development projects and their historical setting and surroundings. To achieve this framework, it is essential to identify the conditions that shape the various approaches employed in Iranian historical cores. Urban transformation and development trends and their evolution in the Iranian context, as well as the current administrative structure and Iranian heritage management system should be studied. On the international level, available charters and recommendations and major literature on urban design and heritage should be investigated to find the most suitable approach for interventions in old cities. In order to develop this framework, international studies and theories have been used as an important source of inspiration. In this process the focus has been on the original theories and founding fathers of various schools of thought on quality characteristics of urban forms. Since the knowledge in Iran about international literature and theories is limited, it is necessary to lay out the original concepts clearly instead of focusing on the latest international developments. This provides a solid basis of urban design quality criteria, from which the translation to the specific Iranian situation is made. These generic and original international theories have been used to extract the three main pillars of the framework.

Cross-cultural research requires a careful approach. To avoid the risk of a static transfer of international concepts and guidelines to culturally specific cases, the main part of the literature and cartography review focuses on analysing and investigating traditional

Iranian urban forms and their qualitative characteristics. To transfer and connect international literature to the Iranian heritage context, traditional urban forms have been used as an essential interface. These analyses assist us in the differentiation and localisation of the originally generic evaluative notions. The Bazaar in particular has been studied as a model of a highly-appreciated and functionally successful urban space in Iranian cities and analysed to extract relevant parameters in these three main pillars. This set of parameters has been clarified and developed to an operational framework of quality attributes, able to be used by practitioners and urban designers in Iran.

After developing a list of relevant parameters to evaluate and assess the outcomes and impacts of recent interventions in Iran, it is necessary to test these on appropriate testing grounds. The empirical core of this research, therefore, rests in a case study strategy, since it provides greater depth and a real life context to the research. Yin also suggests case study research when the focus is on a contemporary phenomenon wherein the researcher does not have any control over the circumstances (Yin 2003).

Shiraz, the sixth largest city in Iran, has been chosen as a representative of valuable urban heritage with respect to the spatial patterns and significant monuments it houses on the one hand and the development programmes and policies it has experienced on the other. Shiraz has been chosen due to various reasons which are explained in the second chapter. The most important reasons are:

- Shiraz is a medium-to-large sized city among Iranian cities which can represent most Iranian cities.
- 2 Shiraz has a great reputation due to its historical city centre and receives a number of tourists as well as pilgrims.
- 3 Shiraz has experienced many regeneration and redevelopment programmes both before and after the 1979 revolution.

TWithin the historical core of Shiraz, two major projects have been chosen as case studies. These two cases are representative of contemporary approaches employed by national and local authorities during recent decades. They are two adjacent neighbourhoods in the historical core of Shiraz and are also comparable in terms of size and type, historical characteristics, population, social and economic problems and the intervention period. The case of Shah-e Cheragh exemplifies a physically-led, redevelopment oriented approach employed by the central government and religious authorities. The case of Sang-e Siah shows a conservation-led approach that integrates sensitive urban developments within the historical environment and has been initiated and financed by the local authorities. The first is representative of the dominant approach which has been pursued in recent decades by the state authorities, and the latter is an example of a new model followed by the local authorities after a series of political, social and economic changes initiated in 1997.

The reasons behind choosing these two projects are explained comprehensively in the fourth chapter. The availability of information and access to resources have also been considered as important factors for the case study selection in this research. The quality framework which has been developed with regard to international ideas and traditional Iranian urban forms is used in the study and evaluation of these two cases.

This investigation primarily uses qualitative data sources. The study relies on multiple sources of evidence which result in the reliability and validity of the investigation. By studying the various dimensions of the problem from different view-points and disciplinary angles as well as using different sources of information and evidence, a case-study strategy becomes a powerful tool of research (Stake 1995).

In the study and analysis of the case studies, primary and secondary sources of evidence have been used. Primary sources include original documents, maps and photographs published in documentation for the projects, published and unpublished materials and archives about case study city and Iran in general and direct observation of the events and circumstances of the case study projects. Secondary sources include information that has been gathered by interviewing consultants that participated in the project, interviewing residents of the study areas or following local news on the case studies. Combining materials from both of these sources helps to provide a clear picture of the urban design approaches in this specific heritage context. Interviews were meant to be used as a supplement to the qualitative analysis of the framework. However, the timing of the projects and administrative problems prevented this source of information from being of great help. The project that was the basis for the second case study encountered major opposition from heritage activists as well as residents. The project was put on hold during the last year of this research due to administrative and delivery problems. This made it more difficult to gather sufficient data for analysis and to monitor the effects of the project at an urban and a neighbourhood level. Even though a number of interviews were done with Bavand Consultant office in Shiraz on this project, after stopping the project the authorities and stakeholders no longer took part in the interviews and therefore the collection of their ideas remained incomplete. Similarly, interviews with residents did not continue once the project stopped, but their major ideas and requests have been followed in social media and local news.

The implementation of the fieldwork and data collection faced several limitations and obstacles due to the lack of available, updated and reliable data as well as the difficulties in contacting suitable stakeholders and representatives for interview. Another important difficulty in the interviewing process was the lack of transparency in the projects, especially those related to national budgets and religious authorities. One of the major research problems has been the scarcity of information about urban projects in Iran, the actors and agencies involved and the lack of valid and necessary statistical data at neighbourhood and quarter level.

§ 1.4.1 Research Design

In this section the research design of this dissertation is explained. Research design is the ordering of the key elements of the research, linking the empirical data to the research objectives of the study and subsequently to the conclusion. As Yin notes, it is "a logical plan for getting from here to there, where here may be defined as the initial set of questions to be answered, and there is some set of conclusions (answers) about these questions" (Yin 2003, p 20).

This study is divided into five chapters. The first chapter (Introduction) provides an overview of the research problem and introduces the aim and objectives of the research. It also briefly explains the research methodology and design.

In order to have a better understanding of different urban strategies in Iranian city cores, it is necessary to have a deeper insight into historical urban cores, concepts of their formation as well as their development and transformation in Iran and Shiraz. Chapter two is divided into two main sections. The first section is devoted to urbanisation history in Iran and tracks changes and modernisation approaches with an emphasis on the last century. It looks at the transformation of the historical environment in Iran and explores the driving forces behind these transformations. The aim of this section is to identify the main policies and approaches towards Iranian heritage employed by the urban authorities, the administrative system and mechanisms that influenced and structured these interventions and the final result on a national level.

After this overview of urban change and the evolution of urban conservation and planning policies in Iran during the last century, Shiraz is chosen as a case study city. The second section therefore deals with a brief historical background of the city and three pivotal phases in the transformation of its historical core. It analyses the process of social and spatial fragmentation and the decline of the historical core and addresses the problems of the area.

Chapter three covers the studies on urban heritage and its value as well as the necessity of urban development and change in urban areas. The benefits and challenges of preserving urban heritage are discussed to identify a reasonable and sensitive approach towards urban heritage. After establishing an integrated approach, three major criteria have been extracted from international literature to shape the three main pillars of the evaluative framework. Traditional urban forms and especially the bazaar have been studied intensively to develop the relevant attributes for urban quality which will be used in analysing case studies in the next chapter.

Chapter four provides the historical background of the two districts, Shah-e Cheragh and Sang-e Siah, located in the historical urban core of Shiraz. Their structural, physical and social transformations as well as the problems and opportunities resulting from these transformations are studied in this chapter. After describing these projects as well as influential factors in the decision making, design and execution of them, the evaluation framework is used in order to analyse and assess the results of these projects. This part weaves together the empirical and theoretical aspects of the thesis.

In the last chapter, the research aims and questions are reviewed, the research questions have been answered and the framework has been modified according to the result of the analysis. After discussing the main findings, areas for further research are outlined.

In Figure 1.1 the main structure of the book and its major sections are illustrated.

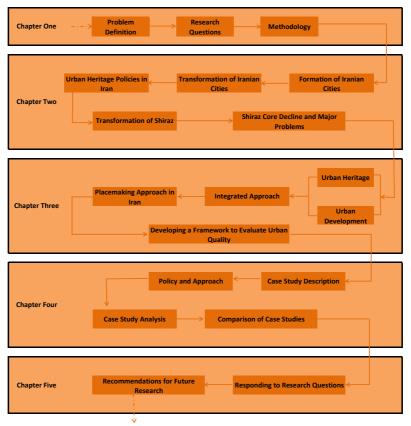


FIGURE 1.1 The structure of the research highlighting chapters and their main focus

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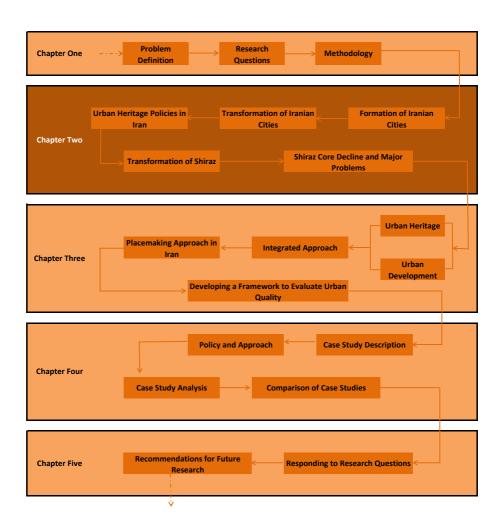
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2 Context



§ 2.1 Introduction

This chapter provides the contextual background for the research in this thesis, divided into two main sections. In the first section, the national context of the case studies is described, with the aim of providing a better understanding of urban change and the evolution of the approach to historical urban cores in Iran. The discussion starts with a brief explanation of how cities first formed in this region and the main factors influencing the formation and location of major Iranian cities. This will help us to achieve a better understanding of the driving forces behind urban settlement in Iran, as a backdrop to an investigation of major urban transformations in Iranian cities. The main approaches taken to the fabric of historical cities in Iran will be identified and the mechanism that shaped these approaches on the national scale will be discussed. In addition, the political, social and economic transformations of the country over the last century will also be described, leading to a more detailed explanation of several interrelated factors that affected the processes of decision and policymaking, planning and implementation of city centre interventions over the last two decades. All of these transformations are found to have contributed to the evolution of urban-conservation and regeneration policies and the emergence of new approaches to the revitalisation of the historical urban environment in Iran. The evolution of these approaches to urban heritage will be described and the governance structure of Iran's historical cities explained and illustrated.

In the second section of this chapter the main focus is at the individual city level, with Shiraz being chosen for two case studies. It is essential to investigate its history, its spatial, social and demographic transformation and the major problems that are faced in this city. This will provide a better understanding of the issues behind and the background to our two case studies within the urban core of Shiraz.

§ 2.2 National Level: Iran

Before discussing the background to urban development in Iran, it is necessary to give a brief overview of Iran and its history.

Iran, also known as Persia (officially, the Islamic Republic of Iran), is located in western Asia (also known as the Middle East) (Yarshater 1989). It shares borders with Armenia and Azerbaijan in the northwest, with Turkmenistan in the northeast, with Afghanistan and Pakistan in the east and with Iraq and Turkey in the west. The Caspian Sea lies to the north and the Persian Gulf and the Gulf of Oman to the south. With an area

of 1,648,195 km2, it is the second largest country in the Middle East and the 18th largest in the world. Iran is also the world's 17th most populous nation, with 78.4 million inhabitants (Encyclopedia-Britannica 2015). Iran has long been of geostrategic importance because of its central location in Eurasia and, in particular, due to its proximity to the Strait of Hormuz.



FIGURE 2.1 The location of Iran in the world Source: http://www.wpmap.org/wp-content/uploads/2016/01/1280px-Iran_in_the_world_W3svg.png

While Iran has been the seat of many global empires, its history began with the formation of the Elamite Kingdom between 3200–2800 BC, one of the oldest civilisations in the world (Diakonoff 1985). The Medes united the area to form the first empire in 625 BC, which made it the dominant cultural and political power in the region (Diakonoff 1985). Iran reached the zenith of its power during the Achaemenid Empire, founded by Cyrus the Great in 550 BC, which at its height included major

regions of the ancient world, stretching from parts of the Balkans in the west to the Indus Valley in the east, making it the largest empire in the world at that time (Cook 1985). The Achaemenid Empire collapsed in 330 BC following the conquests of Alexander the Great. The Parthian Empire emerged from the ashes and was succeeded by the Sassanid dynasty in 224 AD, under which Iran again became one of the leading powers in the world, alongside the Roman-Byzantine Empire, surviving for a period of more than four centuries (Yarshater 1983).

Arab Muslims invaded Iran in 633 AD and the majority of people changed their religion from Zoroastrian to Islam. Afterwards, Iran played a significant role in the Islamic Golden Age, producing many influential scientists, artists and thinkers (Frye 1975). The emergence of the Safavid dynasty in 1501, which promoted Shiite Islam as the official religion, marked one of the most important turning points in Iranian and Muslim history (Jackson and Lockhart 1986). Starting in 1736, under Nader Shah, Iran reached its greatest territorial extent since the Sassanid Empire (Avery 1991). During the nineteenth century, Iran lost large parts of its territory in the Caucasus region to neighbouring Imperial Russia. The Persian Constitutional Revolution of 1906 established the nation's first parliament, which operated within a constitutional monarchy. Following a coup d'état in 1953, supported by the UK and the US, Iran gradually became very close allies with the US and the West in general. Being close to these powerful nations, Iran remained a secular state but at the same time became increasingly autocratic. Growing opposition to foreign influence and political suppression resulted in the 1979 Revolution, which led to the establishment of the Islamic Republic on 1 April 1979, which still exists today (Abrahamian 1982).

§ 2.2.1 Formation of Iranian Historical Cities

Cities are identified as points of maximum concentration of power and culture (Mumford 1961) and, as Kostof states, the absolute size or population has nothing to do with this definition, with the settlement density the vital factor (Kostof 2001). Cities, in general, are found in clusters, while a town never exists without the company of other towns. However, the actual formation of cities is dependent on a number of significant factors. In the Iranian case, the climate and physical environment, as well as the direction of major trade routes, are clearly among the influential factors determining the location of Iranian settlements. Iran is a mountainous country, with an average height of more than 3,000 feet above sea level. It is located between two major bodies of water and is enclosed by mountain chains rising from these two depressions and a mountain chain rising from the plain of Mesopotamia to the west. This has created a specific bowl-shaped physiography and a generally dry climate. While the

bases of the mountains receive a considerable amount of moisture, the central basin of the plateau receives little precipitation, except for two strips to the north and west.

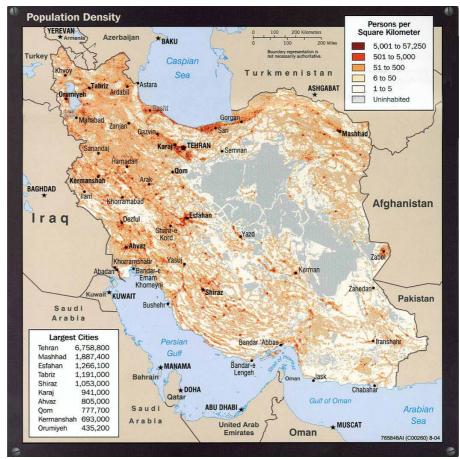


FIGURE 2.2 Iran population density map, 2004
Source: University of Texas Library website: http://www.lib.utexas.edu/maps/middle_east_and_asia/iran_country_profile_2004.jpg

Due to the general dryness of the country, water has always been an influential factor in the distribution of settlements and human activities throughout Iran. The majority of settlements in Iran have annual precipitation levels that are less than the minimum required for crop production, and most of them do not rely on any major river with sufficient discharge for agriculture use. The existence of these cities is founded on the availability of subsurface water reservoirs, which have traditionally been accessed by the Iranian population through the building of Qanats (Kheirabadi 1991). Qanats cannot be built in all arid regions of the plateau as they require a groundwater source

located either at the foot of a mountain or in a place that can be reach by streams and rivers flowing from highlands with sufficient precipitation.

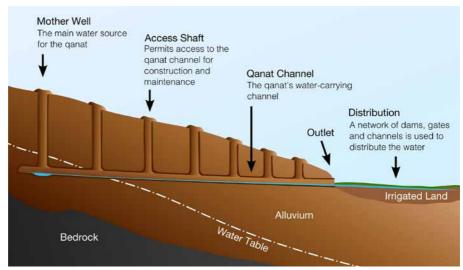


FIGURE 2.3 A cross section of a typical Qanat Source: Wikipedia by Samuel Bailey.

Apart from settlement location, the spatial morphology of the traditional Iranian city is a cultural-historical response to the natural environment, especially with respect to coping with climate conditions. To deal with the harsh climate, traditional Iranian cities were designed to minimise the direct impact of solar radiation, to avoid the flow of unpleasant winds and to optimise the use of shade, breeze and water.



FIGURE 2.4 Yazd city view: compact and courtyard houses along narrow twisting streets; a very typical form for the warm and dry cities of Iran. Photo by Abdul Jabbar Qorraii.

Another influential factor in the formation and development of Iranian cities has been the ancient trade routes. Since antiquity, nearly all of Iran's major cities have been located along these trade routes. Of these, the Silk Road was the most important commercial route of the ancient world, covering over ten thousand kilometres from China to Syria. On the Iranian plateau, the Silk Road connected major ancient capital cities.

The other major ancient route was the Royal Achaemenid road, which stretched over 2,500 kilometres and connected Persepolis (the summer capital) with Susa (the winter capital) and continued northwest towards the capital of Lydia, Sardis. Another significant trade route stretched from north to south, connecting the city of Rey to Isfahan, continuing through Shiraz and all the way to the Persian Gulf.



FIGURE 2.5 Ancient trade routes through Persia. Source: after (Habibi 1996)

Caravanserais were developed along these trade routes as distribution centres for consumer goods as well as providing resting places for merchants and protection for their goods. Caravanserais were usually built in small agricultural settlements along the trade routes due to the availability of water and food.

Acting as commercial nodes, these settlements attracted larger numbers of merchants and workers from neighbouring areas. As the population of a settlement grew, the pattern of land use within it would begin to change, with agricultural fields gradually

transformed into residential and commercial uses and the major streets of these settlements evolving into the main centre for trade and crafts, ultimately becoming the settlement's linear bazaar.

A bazaar would expand along the main axes of the city and even stretch its branches into the residential areas. A number of gates and walls would be erected at the ends to ensure the safety and security of the inhabitants. Through this sequence of events the settlement gradually evolved from a small agricultural settlement situated along a major trade route into a commercial city (Kheirabadi 1991).

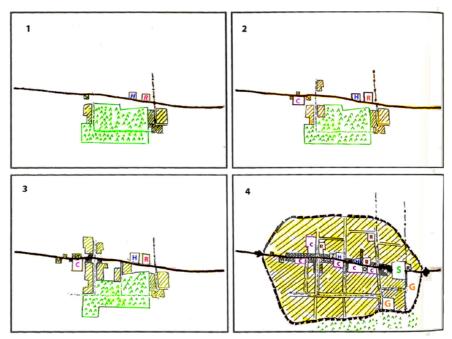


FIGURE 2.6 Formation and development of a city along trade routes. A small agricultural village with religious building (R) and public bathhouse (hammam: H) (Picture 1) has been transformed into a place with a caravanserai (C), which acts as a resting place for merchants (Picture 2). The number of residential units increases due to the number of jobs provided by trade activities (Picture 3) and gradually a bazaar with a number of caravanserais and service facilities form along the trade route (Picture 4).

Source: after (Kheirabadi 1991, p 46)

Political power and autocratic rulers have also played an important role in the formation of Iranian cities. Political leaders tended to demonstrate their power and authority by rebuilding some parts of an existing city, as well as adding new parts or building a completely new bazaar or complex in another section of the city. When an entirely new complex was built, the core of the city gradually shifted from its former

location to the newly developed site. The capital cities of various dynasties are good examples of royal influence in Iranian city planning. For example, in Isfahan, the bazaar expansion and many other important structures around the new square were developed under the reign of Shah-Abbas I, the most popular king of the Safavid dynasty. After the construction of a new bazaar north of Shah Square, the core of the city gradually shifted from the old bazaar area around the Friday mosque to the site of the new bazaar and the royal palaces (Gaube 1979).

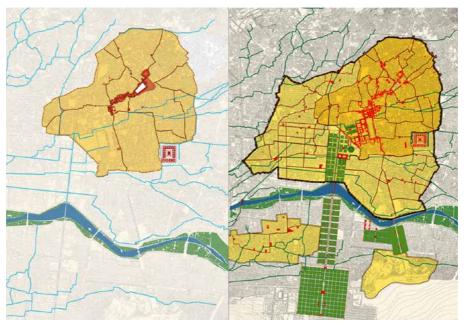


FIGURE 2.7 Spatial pattern and morphology of Isfahan under the reign of Seljuq (left) and Shah-Abbas I, the king of the Safavid dynasty. apart from the expansions on the other side of the rive (which were formed by and for Armenian immigrants), the new city development was designed in close relationship with the old core. Image by Caroline Mawer

Shiraz is another example of the importance of a leader's taste and decisions in the development of the spatial pattern and morphology of an Iranian city. Shiraz flourished under the reign of Karim Khan Zand, the founder of the Zand dynasty (Clarke 1963), and the expansion and development of Shiraz will be explained in detail in the next section. Ruled by kings for over 2,500 years, many other Iranian cities display the clear impact of powerful individuals and leaders on their morphology and structure.

Religious beliefs have also been an influential factor, affecting all aspects of citizens' lives, including the socio-political organisation of society and the form of cities. After the arrival of Islam, the Zoroastrian fire temples were often replaced by mosques.

However, despite the popular belief concerning the model of the Islamic city, it is not the mosque but the bazaar that forms the centre and is the actual focus of the typical traditional Iranian city. The Friday mosque was located where it could be reached by Muslim inhabitants and became the focal point within the bazaar. In addition, the mosque acted more as a social institution; with the emphasis not only on religious rituals, but also on secular activities (Pope 1967).

While mosques are common features in all Islamic cities, Imāmzādehs¹ and shrines are usually specific to the Shiite sect of Islam and when located within cities they form one of the major core areas. In Iran, the religious importance of these buildings often surpasses that of the Friday mosque and they become the major sites and gathering places for citizens as well as pilgrims.

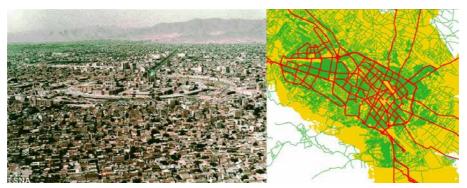


FIGURE 2.8 The structure of the great city of Mashhad shaped around the main core of the city (Shrine). Image source: Mashhad municipality

A remarkable example of this is the great city of Mashhad, the second largest city in modern Iran. Mashhad was a village known as Sanabad at the beginning of the ninth century AD. During that century, Imam Reza, the eighth Shiite Imam, was poisoned (according to Shiite belief) and buried in this village. His shrine attracted visitors and pilgrims from different parts of the Shiite world and the small village of Sanabad developed into a major city. Its name was changed to Mashhad (place of martyrdom) and it gradually became more important than its two contemporaries, the ancient cities of Nishabur and Tus.

^{&#}x27;Imamzadeh' means 'offspring' or descendant of an imam. Imamzadeh is also a term for a shrine-tomb of the descendants of imams, who are directly related to Muhammad. These shrines are only for the descendants of imams and not for imams themselves. These shrine-tombs are used as centres of Shiite devotion and pilgrimage and are also believed to have miraculous properties and the ability to heal.

Due to its extraordinary religious and cultural importance, the haram (shrine) has always been the main urban core of Mashhad. Its location has influenced the structure of the city in such a way that the morphology of traditional Mashhad does not follow that of most other Iranian cities. Most cities developed primarily as trade centres with a bazaar as their central core, while in Mashhad the haram forms the true centre of the city. Nevertheless, the bazaar is the main backbone of the city and it has a close relationship to the haram, to which it is structurally connected, acting as the main access route for residents to reach the haram.

It is impossible to identify one single factor as the main definer of the morphology of the traditional Iranian city, be it Islam, trade or the environment. While the Islamic influence on Iranian urban form should not be underestimated, other factors such as physical environment, trade and political forces should also be considered equally significant in the formation of Iranian cities. However, what makes the traditional Iranian city unique and a valuable source of study for architects and urban designers is its responsiveness to the Islamic-Iranian culture and the great harmony between its structure and the natural environment.

§ 2.2.2 Transformation of Iranian Historical Cities

The process of urban transformation in Iran has changed dramatically since the late nineteenth century. Unlike earlier periods of transformation, which were slow, gradual and more restricted in size, the modern changes have been large scale and destructive. Until the nineteenth century, apart from a limited number of cases, the government was not involved in the development of the urban space and most religious buildings and public services were built by private individuals (wealthy merchants, endowment institutions, etc.) and maintained through private charities (Marefat 1997, Madanipour 1998).

During this period, every development project had to be carefully situated within the context, and the outcome was usually respectful and adapted to the context (Madanipour 1998).

After the re-establishment of a centralised² state at the beginning of the twentieth century, the 'authoritarian' government invested in the planning and implementation

The centralised and bureaucratic system goes back to ancient times in Iran and had been practised in mediaeval times by the Seljuk (1037-1307) and also by the Ilkhanid (1256-1380) and Safavid (1502-1736) empires. Madanipour, A. (1998). Tehran: the making of a metropolis. Chichester, England, John Wiley.

of large-scale urban (re-)development projects and the transformation of the cities and their historical cores (Izadi 2008).

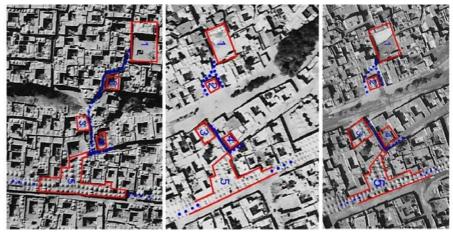


FIGURE 2.9 Transformation of a neighbourhood centre near Kerman Bazaar, Aerial photos from left to right: 1956, 1976, and 1996. Image by author on basis of Archive photos of Iran National Cartographic Centre.

Following a brief review of large-scale interventions in the pre-modernisation period, this section will identify and describe three key periods of transformation within the last century, during which the state has directly or indirectly initiated and managed radical changes. The first key stage occurred during the period from 1920 to 1941 with the radical authoritarian modernisation plans of Reza Shah transforming the physical structure of cities. The second period is more apparent, occurring in the 1960s and 1970s, with social-physical transformation of urban areas inspired by modernism thinking imported from the West. The third period of transformation concerns the first decades of the post-revolutionary period (1979-1999), during which cities experienced rapid expansion and the historical city centres changed dramatically.

History of Large-scale Intervention Patterns

In past centuries, various ruling powers undertook large-scale interventions in the urban environment in their territory. The modernisation of the existing built environment was one of the main reasons for these interventions. However, the main driving force behind them was always 'essentially political, though the personality or whims of a ruler' was also a factor (Abdulac 1984). These developments symbolised the autocratic power of the rulers, and both the form and development of cities were affected by the direct designs or ideas of the ruling powers. The scale and geometric design of these developments were intended to declare the authority of the political power, which attempted to shape society and the city according to its ideals (de Planhol and Brown 1968, Madanipour 2003).

The large-scale interventions by Shah Abbas, the most powerful Safavid king (1587-1629), in Isfahan, are usually mentioned as an example of autocratic influence on Iranian urban design (Habibi 1996). With the help and designs of Sheikh Bahai, the royal square was planned as a focal point for the new development and also acted as a transition zone between the old and new areas (Figure 2.10): 'The reconstructed city itself was remarkably large and the "Naghshe Jahan" square aptly symbolised this' (Hillenbrand 1986).

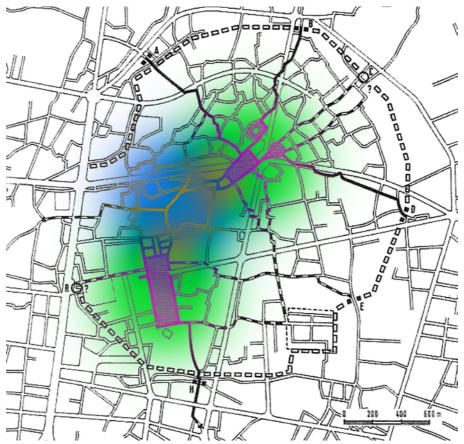


FIGURE 2.10 Development of city core of Isfahan between the eleventh and seventeenth centuries. The bazaar creates a spatial relationship between the old square (upper right) and the new safavid square (lower left). Source: Mohammad Gharipour, Bazaar of Isfahan, Iran Chamber Society, http://www.iranchamber.com/architecture/articles/bazaar_of_isfahan2.php

Isfahan is not the only case of autocratic-oriented urban transformation. Projects of a similar scale were built in other large cities, such as Mashhad, Shiraz and Kerman. Later dynasties (the Zands 1750-1794 and Qajars 1796-1925) also followed this

tradition of urban intervention, relying either on self-funding or funded by state and provincial governors (de Planhol and Brown 1968, Scarce 1991, Safamanesh 1999). As the capital of the Zand dynasty, Shiraz was subject to an ambitious plan consisting of a square, a walled citadel, a palace and a complex consisting of a bazaar, public baths and schools

The Qajars continued this tradition, with the extensive construction of Tehran as the new capital and other cities important to the state. The reconstruction of Tehran started in 1867 with the demolition of the mud brick walls around the city and the extension of the city's boundaries (Madanipour 1998). The new neighbourhoods were built adjacent to the old, with a larger and more regular street grid and new patterns of buildings. Although the scale, form and layout of the new structures were different, the new patterns were integrated with and adapted to the traditional structures (Lawless 1980, Madanipour 1998).

First Transformation Stage: 1920s-1940s

Although Iranian cities underwent large-scale transformations during certain periods in which rich and powerful dynasties reigned - especially in their own capital cities and major cities in their states – the result was always a socially and spatially integrated city structure. Under Reza Shah's plans, however, this contextualism could not survive, as his main vision was to change the social and spatial formation of the country (Ehlers and Floor 1993, Boroujerdi 2003, Madanipour 2003, Atabaki and Zurcher 2004). He pursued his programme based on a combination of the three concepts of 'nationalism', 'secularism' and 'modernisation', aiming to remove the traditional administrative system of the Qajar dynasty and give more power to the government. The major acts of the 'totalitarian and secular regime' of Reza Shah focused on the centralisation of government. This entailed the restructuring of the army, as well as the government bureaucracy and court system, and also developing the industrial manufacturing and transport network (Amirahmadi and Razavi 1993). Reza Shah considered centralisation of Iran not only in political independence and unity of the country but also in cultural and social unity of the people who lived within the present day boundaries of Iran. The Persian language was established as the official language throughout the whole country and regional differences in clothing, customs and such like disappeared from society (Atabaki and Zurcher 2004). These activities led to the development of a capitalist system through the dismantling of the feudal system, the increasing involvement of the state in foreign trade and a change in socioeconomic patterns from production to consumption (Abrahamian 1982, Hesamiyan 1984, Habibi 1996, Madanipour 1998, Cleveland 2000, Hajyousofi 2003).

Improvement of health and sanitary conditions and the start of rural-urban migration (caused by the government's industrial policies) resulted in population growth, which

in turn influenced governmental urban development plans. Policies on urban renewal and modernisation of traditional centres are among the most significant development plans during this time. The first efforts towards the modernisation of urban life required space for automobile traffic within the cities, resulting in the destruction of large parts of the historical urban fabric, including city gates and walls. Wilber describes these interventions: 'Reza Shah attacked the cities and towns in order to make them architecturally modern. Old city walls were pulled down; the tiled gates of the Qajar period were destroyed and wide avenues were driven through the traditional city' (Wilber 2000). The strategy of urban clearance and urban renewal programmes which began in Tehran was implemented using force and without any consideration for historical growth patterns or observation of cultural values; a pattern later repeated in other towns and cities. The Ministry of the Interior provided clear instructions with regards to the layout and size of the major squares and newly built streets, and even enforced uniform architectural specifications. Apart from the implementation of a large-scale road building programme, the government's nationalist vision influenced the architectural form of new buildings, and 'the religious symbols of the 19th century were replaced with pre-Islamic imagery intended to recall the grandeur of the ancient Persian Empire' (Marefat 1997, p 10). In spite of the central planning principle for the whole country, the level of development was not equal in all cities. "Tehran, of course, showed the largest changes³ while in Tabriz the new streets did not follow the usual grid-iron pattern. In some cases the grid pattern was fully executed out of a sense of symmetry rather than toward any useful purpose. In Kerman three of the new avenues connected with trade routes, while the fourth simply ended at the city's outskirts" (Ehlers and Floor 1993, p 257). Empty lands owned by the government were converted into parks and other recreational facilities⁴, however the main focus was on infrastructure improvements such as water and sewage, electricity, and other public services.

Urban population growth also resulted in the expansion of the old cities and the creation of an entirely new urban morphology. New quarters were constructed in the immediate neighbourhood of the old city centres. Unsurprisingly, the main arteries of the old cities became the axes for the grid-pattern layout of the new areas. In contrast to the densely built-up and populated areas of the old city cores with their traditional sun-dried brick or mud architecture, the new urban quarters differed considerably both in form, function and arrangement. New urban layout and street patterns, in turn,

For Tehran it has been estimated that more than 1.8 square kilometres or 9 percent of the old walled city was devoted to thoroughfares and squares. Source: Keyhan, M. (1932). Joghrafi-ye mofassal-e Iran. Tehran.

[&]quot;The law of 16 Bahman 1307/5 February 1929 assigned all fallow and dead lands, squares, and ditches to the municipality. A part of these lands was turned into promenades and parks as well as sites for municipal buildings. Some 145,000 square metres was appropriated in this way, of which 64,424 was turned into parks." Source: Ehlers, E. and W. Floor (1993). "Urban change in Iran, 1920-1941." Iranian Studies, p 259.

gave way to 'heterogeneous developments both in urban functions and urban culture' (Ehlers and Floor 1993). This type of intervention isolated the old cores and destroyed their traditional structures, which subsequently led to the complete deterioration of the historical centres

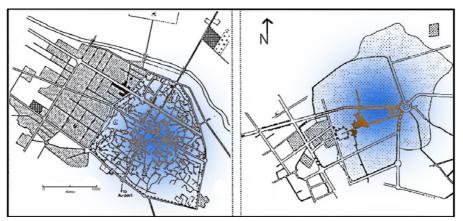


FIGURE 2.11 Plan of Shiraz (left) and Kerman (right) after implementation of a boulevard network on the old city structure. The old city is shown in blue while the new expansions are recognisable by their grid system. Source: The Cambridge History of Iran (1968)

To accomplish his goals, Reza Shah relied on military discipline and power. He did not use municipalities as agencies for local planning, but as instruments to be used to control and implement his ideas (Mazumdar 2000). These were supported and legitimised by new laws and regulations, such as the Municipal Law of 1930, the Compulsory Purchase Act of 1930 and the Street Widening Act of 1933 (Mozayeni 1974, Clark 1981). Reza Shah's government was financially supported by oil revenues that increased more than six-fold between 1920 and 1941 (Boroujerdi 2003).

The policy of Reza Shah to develop all sectors of public life and economy resulted not only in restructuring and modernisation of existing cities, but also led to the foundation of new cities as centres of industry and administration. Existing villages were converted into new towns and due to their limited size and minor traditional architecture, this prescribed planning left a great mark on their appearance and layout. An example of this development is the city of Babolsar in the province of Mazandaran, which was developed mainly as a coastal resort.

In general, in the 1920s to 1940s, the dominant approach to the historical urban cores was very radical and development-led, with municipalities only being the executers of these plans. New streets were introduced into the historical quarters to give access to cars, and new business areas developed along these new streets. New quarters

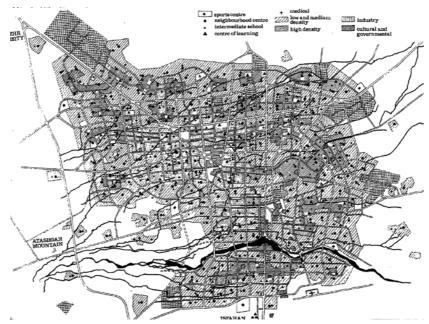
were also developed in new areas, which were entirely dominated by Western⁵-style architecture and infrastructure. The upper and middle classes abandoned the historical cores for these newly developed quarters, which resulted in the rapid social decline of the old centres. Thus, the characteristics of Iranian cities in the 1930s and the 1940s reveal a dualism not only in their physical structure and architectural details, but also in their social and economic structure (Keddie 1981, Ehlers 1992). However, despite the socioeconomic changes and the spatial transformation of these urban cores, they still played a significant role in the everyday life of the city and offered economic, social, religious and cultural opportunities in this period, resulting in a tense coexistence of old and new (Madanipour 2003).

Second Transformation Stage: 1950-1979

During the Second World War, the Allies violated Iranian neutrality and occupied the country, forcing Reza Shah to abdicate. Prince Mohammad Reza replaced him on the throne on 16 September 1941 and became a powerful ally of the US in the region, which provided a basis for the emergence of a new wave of modern policies influenced by Western ideas. These policies accelerated the process of social and spatial transformation of the country. The introduction of modern planning policies, including master planning⁶, led to the preparation of master plans for all cities, undertaken by Iranian consultants in association with a European or American partner and in the absence of any local representative (Cantacuzino 1976). The main reason to start master planning was the enormous growth of cities. The pilot city project had been initiated in Isfahan (Figure 2.12) and continued in other cities such as Sanandaj and Shiraz. These master plans were focused on the road network, land use and building density or height, and attempted to achieve their initial goals by regulating these three elements. They also encouraged horizontal expansion of the cities reduced the concentration of activities in the old city centres, which created urban sprawling. In addition, a rectangular grid of roads designed for cars was superimposed on the old quarters disregarding their historic evolution and older patterns of growth. This was accompanied by a series of guidelines that aimed to regulate individual construction which were not realistic or applicable regarding the culture of the majority of the population (Ardalan 2000). Therefore, most of the new structures lacked the formal and functional qualities of the existing urban fabric.

- Western-style is mainly defined in Iranian literature as the new and modern imported life style from Europe and America which entered the country by Iranian engineers and intellectuals after working and studying abroad. This influenced and accelerated architectural and urban changes.
- This was initiated under 'Point Four' plan which was a series of financial, technical and military aid programme proposed and led by the United States and its allies for underdeveloped regions. Source: Farahmand, J. (2003). "Point Four." IICHS-Baharestan Electronic Journal.

While historical buildings and monuments were identified in master plans, their historical settings were neglected. In some major Iranian cities, 'the policy was to free major monuments and large public buildings from their surroundings by demolishing a 100m zone around, thus removing them from their context and historic setting' (Lawless 1980, p 208).



 $\begin{tabular}{ll} FIGURE 2.12 & The comprehensive master plan of Isfahan produced by E. Beaudouin and Organic Consultants Source: (Cantacuzino 1976, p.8) \end{tabular}$

Revenues from the oil industry (from the mid-1950s) also caused rapid growth in the urban population, from 5.6 million in 1956 to 9.7 million in 1966 and 13.2 million in 1972. At the same time, rapid industrialisation, starting in the mid-1950s, the land reforms of 1960 and a crisis in agricultural production accelerated the migration of people from rural areas and small towns to large cities (Keddie 1981, Dehesh 1994, Madanipour 2006). This demographic change in the cities led to many drastic changes in the internal and external structure of Iran's cities (Mozayeni 1974).

Ehlers believes that the expansion of the cities and the urban sprawl that occurred were not only the result of rural migration but also due to the new quarters, which were built by and for prominent individuals and urban-based rural landlords. They invested their money in real estate and moved out of the old city quarters to settle in these new quarters (Ehlers 1992). The decaying old urban districts attracted rural migrants

looking for cheap accommodation and jobs in the informal sector of the economy. The emergence of these new social groups in the old centres resulted in the breakdown of the social structure of the city. The contrast between the new districts and the old urban core became increasingly obvious in terms of physical appearance, population density and social characteristics. The proportion of old and new parts of cities also changed significantly and the old city cores became minor parts of larger sprawling cities, losing their social and economic importance.

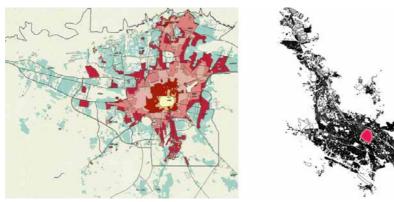


FIGURE 2.13 The historical cores became minor parts of sprawling cities (left: Tehran with historical core shown in yellow, right: Shiraz with historical core shown in red)

During the 1970s, income from the flourishing oil industry also transformed the social and spatial structure of Iran's historical cities. This prosperity allowed the government to spend ambitiously on the large-scale modernisation of the old cores (Mazumdar 2000). Foreigners, mainly American, were commissioned to submit plans for this rapid modernisation (Hambly 1991). At the same time, the government initiated new town programmes, urban renewal projects and many large housing projects to accommodate the rapidly growing population (Ardalan 2000, Farmaanfarmaiyan 2003). The large-scale reconstruction programme for the historical core of Mashhad, a massive redevelopment project in the historical city centre of Hamadan (Figure 2.14) and new commercial development around the Mausoleum of Shah-e Cheragh in Shiraz during 1973-1978 were among these interventions (Izadi 2008).

To deal with the increasing tendency towards city expansion, the government introduced new incentives to encourage investment in the historical urban centres. A new law offered exemption from tax for any owner who replaced their old house with a new building (Lawless 1980). This law intensified the destruction of old districts, with many of the large traditional courtyard houses demolished by their owners, who then either sold their subdivided plots or built multistorey blocks of flats for better financial returns.

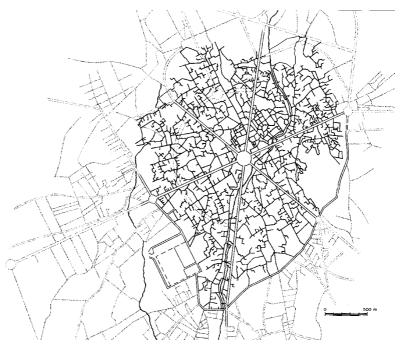


FIGURE 2.14 Large-scale redevelopment programme in the historical core of Hamadan initiated by the Mortgage Bank (Bank Rahni) in 1973
Source: (Ehlers and Floor 1993, p 256)

After the establishment of the Ministry of Development and Housing in 1964, the responsibility for the provision of city planning policies, regulations and master plans, which previously lay with the Ministry of the Interior and the municipalities, was transferred to this central agency (Shahrokhzadeh 1997). However, during this period centralised policy and decision-making did not change. The multiplicity of development agencies and the absence of horizontal coordination between them led to conflict between these public agencies. The dominant approach was still the modernisation of the historical urban cores on a massive scale and the development of new quarters in Western styles and methods. Master planning dominated urban design strategies, and continued to be mainly focused on traffic and land-use plans. Also, new legislation? was created to enable the government to undertake these extreme interventions.

"The Land Appropriation Act of 1960 granted the government the power of compulsory purchase; the Urban Development and Redevelopment Act of 1968 gave greater power to municipalities to acquire land; and Plan and Budget Act of 1972 introduced ways to determine the reasonable land price." Source: Izadi, M. (2008). A Study on City Centre Regeneration: A comparative analysis of two different approaches to the revitalisation of historic city centres in Iran. PhD thesis, Newcastle University. P. 77

The Third Stage: The Post-Revolutionary Period

This period started with the Islamic Revolution in 1979 and the war with Iraq, and continued with the economic and political reforms during the post-war reconstruction period. During each of these phases a different approach to the historical urban cores dominated. The necessity of reclaiming lost cultural heritage, reincorporating concepts and practices from traditions, and promoting the notion of Islamic authenticity were some of the goals of the Revolution (Kazemi 2003). Some cultural traditions were restored and the power of the middle classes (the clergy and the bazaar community of merchants and artisans) was reinforced after the revolution of 1979. However, the major policies and practices of the previous regime remained unchanged.

The Iran-Iraq War lasted until 1988, diverting much of the resources to war-related projects. The value of oil exports and the foreign exchange rate declined and rapid population growth also forced the country towards greater centralisation (Dehesh 1994, Cleveland 2000, Keddie 2003). The large cities continued to be the centres of economic activity and services; and the urban population continued to grow, from 15.85 million in 1976 to 48.64 million in 2006 (Table 2.1). The flow of rural migrants to cities and massive population movement from the areas affected by war were the major factors behind the increase in the urban population.

POPU- LATION	1976		1986		1996		2006		1976- 1986	1986- 1996	1996- 2006
	Million						Million				Change %
Total	33.71	100	49.45	100	60.06	100	70.50	100	46.68	21.45	17.38
Urban	15.85	47.0	26.84	54.3	36.82	61.31	48.64	69	69.32	37.26	32.10
Rural	17.85	53.0	22.60	45.7	23.24	38.69	21.86	31	26.58	2.83	-5.94

TABLE 2.1 Urban and rural population of Iran between 1976-2006; Source: Markaz-e Amar-e Iran (Iran Statistics Centre)

In this period, the central government attempted to control the rapid expansion of urban areas through a number of policies (Dehesh 1994, Madanipour 1998). The major policies used included the reorganisation of the planning system, the development of a new series of master plans, the establishment of new satellite cities based on Act 1985, and the introduction of land development plans for undeveloped areas on the periphery of the large cities.

Although urban land policies and development plans had some positive effects, they created large new urban residential areas within a short period of time, which intensified rapid urban expansion and resulted in many problems for the cities,

particularly for their historical cores. The historical city cores, which had faced decay, abandonment and a lack of investment now account for only a very small portion of the present-day urban areas: 2.83 percent of the urban area in Tehran, 1.57 percent in Mashhad, 6.05 percent in Isfahan, 1.82 percent in Tabriz (Izadi 2008).

Apart from the issues already discussed above, legal and official obstacles imposed by master plans severely restricted the rehabilitation and redevelopment of these areas. At the same time, the government established new organisations which took parallel roles to the existing ministries, such as the Martyrs' Foundation and the Housing Foundation 'to foster the process of change and development with the help of revolutionary organisations which were not stuck within what was thought to be a corrupt and inefficient bureaucratic web' (Madanipour 1998, p 165). This was accompanied by the development of religious institutions which worked independently of the state with no government supervision over their operations (Saeidi 2004). These foundations, which still enjoy significant economic and political privileges, were directly and indirectly involved in the development process.

The first decade of the post-revolutionary period coincided with the end of the war with Iraq (August 1988) and the death of the revolution's leader, Ayatollah Khomeini (June 1989). The new political leaders outlined a reform programme to promote modernisation and development and assess the strengths and weaknesses of previous policies. In 1989, the state announced the First Five-Year Economic, Social and Cultural Plan. The primary aim of this plan was to restructure and liberalise the economy, promote private investment and to reconstruct the war-damaged region. This reconstruction ambition was mainly encouraged by the oil boom during 1989-1991, which enabled public agencies® to execute large-scale development projects to address the housing needs created by an overflowing urban population. These large-scale development projects resulted in the functional and spatial fragmentation of the historical structures of the cities, directly affected their social and economic structure and intensified problems in the historical areas.

The Second Five-Year Economic, Social and Cultural Plan was prepared for 1995-2000, and generally speaking followed the strategies of the previous plan. Despite the emphasis on privatisation and reducing state intervention, the government did not show any tendency to do this, as 'for the first time since the Shah's fall in 1979, the government is now both powerful and relatively centralised' (Milani 1993, p 97). The tendency towards the centralisation of political and economic power resulted in

The New Town Corporation (established in 1988) and the National Land and Housing Organisation (established in 1992 by merging the Housing Organisation and the Urban Land Development Organisation) are among the largest government development agencies, established by the Ministry of Housing and Urban Development.

the development of a number of public and semi-public agencies which became 'the channels through which the earnings of the government, mainly from its monopoly over oil production, are transferred into the market-place' (Madanipour 1996, p 165).

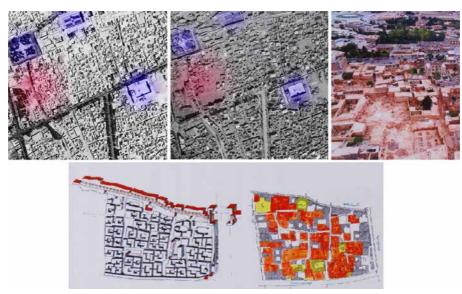


FIGURE 2.15 Urban redevelopment plan for the historical quarter of Qaleh in Kerman. The destruction of 2.7 hectares of the old residential neighbourhood of Qaleh (Which is shown in red in aerial photos from 1977 (upper left) and 1987 (middle)) for the large-scale urban redevelopment plan. For reference, important monuments are highlighted in purple. Source: drawn by author on the basis of archive photos from Iran National Cartographic Centre.

Bottom: The proposed redevelopment scheme for the cleared area (shown in red $\,$ in the upper pictures) between 1993 and 1995. Source: (Izadi 2008)

During this period, the historical city centres, which had been neglected for decades, were considered in the housing policies. Distinct from previous housing policies⁹, the government introduced a series of large-scale neighbourhood renewal projects¹⁰ in more than 40 cities. Between 1994 and 1996, more than 16 projects began in 12 cities, which aimed to reorganise the existing 'obsolete urban area' in the historical

- 9 Such as the production of mass housing in the urban land development projects and new town development programmes
- These series of renewal projects were designed to upgrade more than 1,000 hectares of identified derelict sites within the historical centres of 40 cities. These areas were called 'obsolete urban areas' (Baft-e Masaleh-dar-e Shahri)..

centre. These redevelopment plans replaced abandoned and deteriorating properties with new and modern residential and commercial complexes, with the intention of increasing the density of these areas (UDRO 2001). In two years, more than 51 hectares within a large area (273 hectares), defined as the redevelopment zone for these large-scale interventions, including many properties which were purchased, were demolished and cleared to make space for the implementation of the projects.



FIGURE 2.16 The Navab project is an example of a large-scale reconstruction project carried out by the municipalities. Navab highway was developed as a major north-south connection in Tehran (shown on the right map). The built-up corridor of the Navab project and the line of high-rise buildings next to the avenue can be seen on the left.

Unfortunately, almost all of the projects were suspended in 1996 and remained so for a long period due to land ownership complexities and the lack of financial resources (low oil prices and government foreign debt). The vacant lands and abandoned properties became illegal drug havens and centres of criminal activity, which only increased social problems in these areas and made life harder for the remaining inhabitants due to unsafe living conditions.

While the municipalities were historically dependent on government budgets, during this time, the central government introduced a policy of self-sufficiency for municipalities and persuaded them to look for ways and instruments to gain sufficient

income to run the cities (Azizi 2005). Allowing excess development (or construction density) for a fee, and the development of residential and commercial activities and facilities were among the controversial methods used by municipalities as new sources of income¹¹ (Madanipour 1998).

Navab project in Tehran¹², the Kabood Mosque complex in Tabriz and Bein-al Haramain in Shiraz were among the major innovation initiatives undertaken by the municipalities in this period. Although the implementation of these policies helped the municipalities to finance their activities, they generated considerable negative impacts on the social and spatial structure of the historical fabric of the cities.

Religious institutions and charity foundations also initiated a new wave of destruction of the historical urban fabric, concentrated around shrines, mausoleums and mosques. These agencies obtained a lot of financial and legal power after the Islamic Revolution of 1979. They were, for example, exempted from taxes and many legal restrictions and assessments. They were independent of government agencies and had their own administrative bodies and financial resources (Saeidi 2004). The political and economic authority of these agencies enabled them to organise a series of large-scale redevelopment projects around their religious centres, most of which are located inside the historical cores.

The large-scale transformation and enlargement of the holy shrines in Mashhad, Shiraz and Qom¹³ are among the major interventions over the last two decades which have destroyed or badly damaged many historical urban areas. During this period, the historical urban cores suffered from losses or damages to their social and spatial structures and a lack of investment. This new phase of modernisation can be partly explained by the tendency of the central government to encourage market-oriented technocracy accompanied by modernist practices.

- Such as land-use change, land sale, new tax regulations and the privatisation of many services and parts of the municipalities.
- The Navab regeneration project, which was also included in the first comprehensive plan for Tehran (1968), was a new and the only main north-south motorway providing fast and easy access to and from the central and northern parts of the city. The total project area was 800 hectares and included some twenty neighbourhoods, with a population of 259,828 in 1996...
- The holy shrine in Qom is the most significant reason for the development of Qom as a holy city throughout history. The religious monuments and fabric extended some 92 hectares to achieve the main goal, which was to provide quality spaces for the pilgrims as well as the citizens.

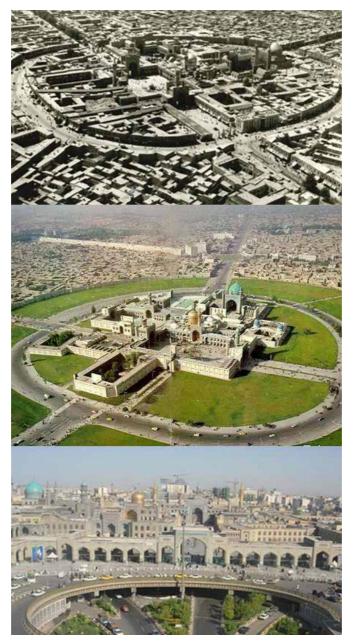


FIGURE 2.17 Large scale transformation and enlargement of the holy shrine in Mashhad

§ 2.2.3 Evolution of Thinking on Urban Heritage in Iran

After reviewing the major stages in the spatial transformation of Iran's cities, it is now necessary to investigate the evolution of the agencies responsible in the heritage domain and their policies on urban cores.

Before the twentieth century, most public facilities and religious centres in Iranian cities were developed and maintained by the private sector and charities. This was actually based on Islamic law (Sharia), which has a well-developed body of laws to regulate the protection, maintenance and repair of community properties and sacred sites (Hodjat 1996, Bianca 2000)¹⁴. Waqf, for example, a form of property endowment, creates a foundation for social responsibility which guarantees the maintenance and restoration of historical sites and also avoids the division of large properties between several inheritors (Jokilehto 1999). A large number of historical monuments, gardens, water reservoirs, caravanserais, bathhouses and mosques in Iran have been endowed by wealthy individuals for a variety of reasons relating to the body of laws and are mostly known by the names of their founders (Keddie 2003)¹⁵.

From 1920, the centralised and authoritarian state modernised the legal system and introduced a new urban planning and management system. The secular state controlled religious endowment activities and restricted the traditional role of Islamic law (Keddie 1981). The municipalities were authorised, through the passage of a new law, to use waqf property within the urban boundaries for urban development (Ehlers and Floor 1993). Anything old or in traditional style was considered outdated and was destroyed or overlooked (Steinberg 1996), while praise of the new and modernisation activities predominated in this period (Madanipour 1998). For example, between 1930-1941 approximately two-thirds of the Qajar structures in the historical core of Tehran were demolished, mainly consisting of residential quarters and service areas (Marefat 1988).

Starting from 1960, the government integrated conservation into the modernisation programme, influenced by Western scholars. The state considered public awareness and the protection of cultural heritage as a way to modernise and progress (Hodjat 1996, Grigor 2005). However, the restoration and preservation of historical

Waqf, La Zarar, Al-baqiat-al-salehat and Anfal are some of the relevant Sharia laws. Waqf entails the unconditional and permanent dedication of a property with the implication that it is placed in the ownership of God. It typically involves donating a building or plot of land or even cash for Muslim religious or charitable purposes.

One of the main reasons was (and still is) the social status of the founder, establishing Vaqf enhances the social prestige of the founder and increased their reputations.

monuments was selective and politically motivated, and was mainly focused on pre-Islamic sites and monuments.

In the 1950s, a new agency was established at the national level which was responsible for the conservation of historical monuments. During this period, a number of conferences were held on the preservation and restoration of historical monuments, sites and structures and a number of adaptive-reuse schemes were initiated in Isfahan¹⁶, Tehran and Shiraz (Abdulac 1983, Ardalan 2000). At the same time, the first series of conservation plans for the historical areas in the cities of Tehran, Shiraz and Isfahan were introduced. However, the majority of the conservation plans and proposals were not executed (Lawless 1980).

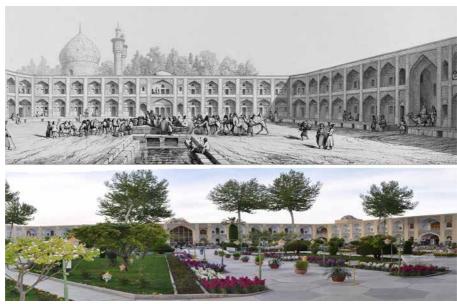


FIGURE 2.18 The upper picture is the Caravanserai of the mother of Shah Sultan Hussein, by Pascal Coste in 1840. The lower picture shows the current four-star Shah Abbas Hotel, taken in 2010.

Although attitudes towards the historical areas began to change, conservation was mainly focused on the major monuments, while the conservation of the urban context

One of the most famous projects in this period was the restoration, adaptive reuse programme and development of Madar Shah Caravanserai into the four-star Shah Abbas Hotel in Isfahan. According to the suggestion of Andre Goddard, who was then the consultant to the Archaeology Bureau, the Iran Insurance Company came to the rescue of the monument (1957). In this way, not only was a valuable historical monument saved, but also the memory of its first use as a lodging for travellers was preserved in a new form.

was neglected, resulting in its considerable deterioration. In some cases, the historical fabric surrounding major monuments was demolished to create large geometrical Western-style squares around them, such as those in Mashhad, Hamedan and Shiraz (Lawless 1980, Abdulac 1983).

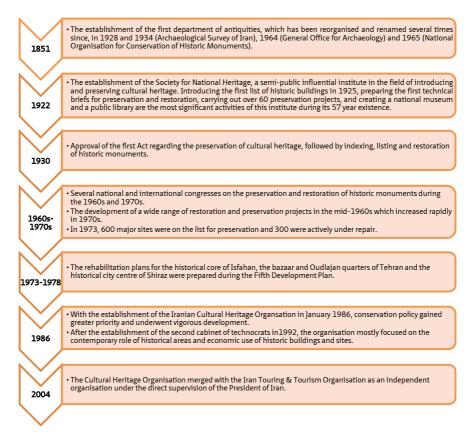


FIGURE 2.19 Major institutional changes, conservation activities and regulatory frameworks employed by conservation agencies 1850-2004. Drawn up by author, derived from Hodjat's (1996) work on the evolution of conservation policy in Iran and extensive work carried out by Ardalan (2000) on architectural activities after the Second World War.

In 1986, the Iranian Cultural Heritage Organisation (ICHO) was established through the combination of various units and institutes¹⁷ active in the field of cultural heritage

These units and institutes consisted of the Iranian Archaeological Centre, the Office of Historical Monuments, the Office for the Conservation of Cultural Heritage, the General Office for Museums, the General Office for Palaces and the Iranian National Organisation for the Conservation of Historical Relics.

(Hodjat 1996). From this time on, the policies and approach to cultural heritage entered a new phase, which resulted in a change of focus from the protection of individual buildings to the protection of entire areas. Moreover, the contemporary use of the historical areas and the economic roles of the old buildings were emphasised and seen as an opportunity for conservation. In 2004, ICHO was separated from the Ministry of Islamic Guidance and was merged with the Iran Touring & Tourism Organisation as an independent organisation under the direct supervision of the President. Tourism was considered a financial engine and sustainable urban conservation received growing consideration.

Figure 2.19 summarises major institutional changes, conservation activities and the regulatory frameworks employed by conservation agencies. This summary is derived from a doctoral dissertation on the evolution of conservation policy in Iran (Hodjat 1996), an extensive work on architectural activities after the Second World War (Ardalan 2000), the planning and development of Isfahan before and after 1920 (Cantacuzino 1976, Lawless 1980), the early Pahlavi modernists and their Society for National Heritage (Grigor 2004, Grigor 2005), and from the history of architectural conservation in Iran (Jokilehto 1999, Moradi 2003).

Another significant organisation dealing with historical city cores and regeneration programmes in Iran is the Urban Development and Revitalisation Company, established after the political victory of reformists in the presidential election of 1997. Its main responsibility at the time was to coordinate regeneration and conservation plans and stimulate new investment in troubled urban areas. The UDRC also acted as the government's advisor on the regeneration of brownfield sites. Rather than economic development strategies, such as those used by the Cultural Heritage Organisation, this new reformist organisation attempted to find a balance between sociocultural policies and political-economic development. etween 1997 and 1999, the UDRC developed its policy and regulatory framework, as well as its financial and technical resources to strengthen planning and policy approaches based on lessons learned from previous experiences. The first elections for local and municipal councils were held in 1999, as the first step towards decentralising administrative power and enhancing the democratic planning system (Keddie 2003, Tajbakhsh 2003). A year later, the UDRC administrative system changed from a company structure to an organisation (UDRO), which implies it gained financial and administrative independence, with its budget directly authorised by the parliament (Hodjat 1996). The establishment of seven regional regeneration companies and a coordinating committee in each province was the result of this new administrative change. At the same time, the third national development plan (2000-2005) attempted to integrate domestic politics and cultural policies with economic reforms. This regulatory setting reinforced the role of local authorities and transferred responsibilities to them, which considerably changed the conception, priority areas, as well as the direction and mechanism of intervention in historical city centres (Izadi 2008).

Since administrative changes in 2004 and the decentralisation policies of the fourth national development plan, the role of the Urban Development and Revitalisation Organisation has shifted from being a direct provider to being a regulator, and it has included more community and social schemes in its strategies, future plans and programmes. In the chart below, the evolution of the regeneration policy and planning system in Iran after the establishment of the Urban Development and Regeneration Company in 1997 is illustrated based on various published papers, reports and books, and the second, third and fourth national development plans.

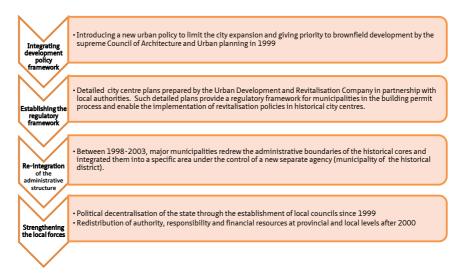


FIGURE 2.20 The evolution of the regeneration policy and planning system in Iran after the establishment of the Urban Development and Regeneration Company in 1997

To conclude, there are two major agencies responsible for historical city cores. The first, at the national level, is the Iran Cultural Heritage and Tourism Organisation. It is also a member of Governmental Commission Number Five, which has major responsibility for approving regeneration and urban plans for historical cities. The other authority is the Urban Development and Revitalisation Organisation, which acts as a regulator and strategy planner at the regional and local levels for the historical districts of cities.

Apart from these two major organisations, there are a number of agencies and institutions involved in decision-making and the approval of intervention plans for the historical urban cores. They all have their own demands, priorities and ideas in dealing with problems in the various city centres. To offer a better overview of the organisations taking part in urban design projects in the historical city cores, the below chart is produced, based on the administrative structure of Shiraz. As can be seen from the

chart, the institutional fragmentation and lack of coordination between these agencies reduces the efficiency of their efforts to regenerate and rehabilitate the historical cores (Izadi 2008).

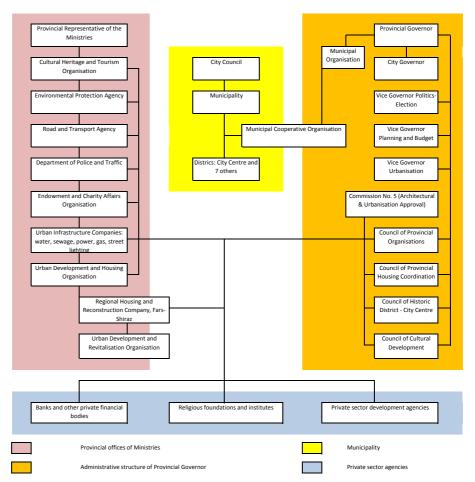


FIGURE 2.21 Overview of urban development agencies involved at the national, provincial and local levels. Source: updated and drawn after (Izadi 2008)

In addition to the lack of an integrated heritage management regime in Iran, the absence of up- to-date legislation by the Iranian Parliament and other responsible organisations on cultural heritage creates problems for effective heritage protection. Updating the national heritage list was considered as an effective legal instrument to safeguard the cultural properties during the last 80 years. Unfortunately, a serious legal challenge has been created. In 2010 the supreme court has removed several historical buildings from the list after property owners had claimed violation of their

ownership rights¹⁸ by the Iranian Cultural Heritage Organisation. This has paved the way for additional legal claims and possible destruction of properties by conversion into shops and multi-story apartments. Furthermore, the Cultural Heritage Organisation has changed its policy and will not add buildings to the national heritage list anymore without permission of the owner. In the future less historical properties, especially valuable houses, will be protected by law. Since the large number of historical bazaars in Iranian cities contain numerous privately owned historical buildings, it is possible that these will also be affected by this supreme court ruling in case property owners go to court to remove their properties from the national heritage list (Rouhani 2009). The consequences of this legal vacuum can be seen in Shiraz, where demolition in the historical centre started thirty years ago, but recently has accelerated.

Development projects have been able to ignore the economic, social and cultural values of historical urban cores because of the inefficient structure of responsible cultural heritage organisations. Iranian laws on cultural heritage are outdated and were passed in a time when the concept of sustainable development was not widespread. As a result, the approach to cultural heritage that follows from these laws does not allow for creative ways in which heritage can participate in new developments. Especially for historical urban fabrics and city cores this is a problem. Protection of these areas is emphasised in the heritage laws, but a suitable strategy for protection of these areas is lacking. Consequently, these important urban fabrics are not well protected against natural and human factors of deterioration and their demolition is justified by the municipality.

According to Article 171 of the Fifth Development Plan of Iran (2011), the responsible organisations (Ministry of Housing and Urban Development and the municipalities) annually have to rehabilitate at least 10 percent of deteriorated urban fabrics. The plan is unfortunately not explicit and does not mention the historical urban cores or cultural heritage. The Fifth Development Plan could be more effective if there was a emphasis on rehabilitation and revitalisation of historical urban centres. Additionally, the role of the Iranian Cultural Heritage and Tourism Organisation is not included in this process. Updated legislation is essential to support the current ideas and attitudes towards heritage, as a driver for sustainable development. The current administrative and legislative problems threaten the continuity of cultural heritage in Iran. When these issues are resolved, the lessons learned will help to spread the sustainable development concept in Iran.

In this case, the ownership right was the permission to destroy historical properties and construct modern buildings instead.

§ 2.3 City Level: Shiraz

Over recent years, a large number of regeneration schemes and projects have been initiated in Iran's capital cities and in particular Tehran, Mashhad, Isfahan, Tabriz and Shiraz. As it was impossible to investigate all of these cities in detail, the task was to identify a city that was representative of a typical middle-sized Iranian city and which had been subject to various approaches to its structure and spatial system over the last century and could thus serve as a case study.

As has been pointed out in the previous section, after the establishment of the UDRO, new strategies were developed to deal with Iran's historical cities. Several interrelated factors at the national, regional and local levels contributed to the changing role and structure of state involvement in urban regeneration processes, providing a basis for the development of a new approach to historical Iranian environments. The pilot projects were started in Shiraz (Sang e-Siah Quarter), Isfahan (Joibareh Quarter), and Yazd (Fahadan) due to the proven ability of local authorities to deal with the problems of the historical environment through their own efforts (Izadi 2008). At the same time, some large-scale intervention projects were designed and executed in the historical urban core of Shiraz and some other cities of religious significance. On the basis of all these conditions, Shiraz was chosen as a case study in this research, providing an opportunity for an in-depth study of urban design approaches in a historical context.



FIGURE 2.22 Location of Shiraz on the map of Iran. Source: U.S. Energy Information Administration(EIA)

Shiraz, the sixth most populous city in Iran, after Tehran, Mashhad, Isfahan, Tabriz and Karaj, is the centre of Fars Province in southern Iran. The city is located 895 kilometres south of Tehran and 100 kilometres north of the Persian Gulf (Encyclopædia-Britannica 2015). Shiraz has a moderate climate and has been a regional trade centre for over one thousand years.

Although Shiraz is regarded as one of the oldest cities of ancient Persia, the first capital of Fars was Pasargadae. Almost 2,500 years ago, Pasargadae was the capital of the Achaemenid king, Cyrus the Great, while the ceremonial capital of his successor Darius the Great and his son Xerxes was moved to Persepolis. Today, only the ruins of these two capitals remain. Estakhr was another capital of Fars, established by the Sassanids. It lasted until the invasion of Muslim Arabs.

Shiraz came into existence only after the Arab conquest of Iran. The Arab invasion, in fact, contributed to its importance and by the thirteenth century Shiraz had grown into one of the largest and most popular Islamic cities of the time (Lockhart 1939). Shiraz spread out like an immense garden on a green plain at the foot of the Tang Allah-o-Akbar Mountain. During this period, Shiraz became a leading centre for the arts and poetry due to the encouragement of its ruler and the presence of many Persian scholars and artists. It became the capital of Persia during the Zand dynasty from 1750 until 1781, as well as briefly during the Saffarid period (Sami 1971). Besides being known as the city of wine and flowers and gardens, Shiraz is also the birthplace and resting place of the great Persian poets Hafez and Saadi. Like most other Iranian cities, Shiraz has experienced a turbulent past as well as various phases of glory as the capital or seat of important local rulers. Although Shiraz was not destroyed during the Mongol¹⁹ and Timur²⁰ invasions, the town was devastated by great floods in 1630 and 1668, by Afghan invaders in 1724, as well as by earthquakes which partially destroyed the city in 1789, 1814, 1824 and 1853 (Lockhart 1939, Clarke 1963, Wilber 1975). Natural disasters, unstable social conditions and political conflict brought disorder, destruction and great loss of life, while phases of peace and prosperity resulted in urban development and population growth.

- The Mongol Empire (1220-1380) existed during the 13th and 14th centuries AD and was the largest contiguous land empire in human history. At its greatest extent it spanned 9,700 km, covered an area of 24,000,000 km2, 16% of the Earth's total land area, and held sway over a population of 100 million. Shiraz was spared destruction by the invading Mongols when its local ruler offered tributes and submission to Genghis Khan. Source: Morgan, D. (2007). The Mongols, Wiley-Blackwell.
- Timurids Empire (1393-1500) was a Persianate Sunni Muslim dynasty of Turco-Mongol lineage which ruled over modern-day Iran, Afghanistan, much of Central Asia, as well as parts of contemporary Pakistan, Mesopotamia, Anatolia and the Caucasus. Source: Manz, B. F. (1999). The Rise and Rule of Tamerlane, Cambridge University Press.

§ 2.3.1 Transformation of the City Core of Shiraz

In the first section of this chapter, the four major periods in the transformation of Iranian cities were discussed. Shiraz was chosen as a case study city because it has also been subject to different strategies and approaches to its historical urban core. This section presents a historical analysis of Shiraz's development and the transformation of its urban core. It analyses the process of social and spatial fragmentation and the decline of the historical core and addresses the problems associated with these events.

The urban core of Shiraz experienced various waves of transformation and redevelopment during four key periods: the Zand dynasty (1750-1794); a period of modernisation under Reza Khan (1920-1941); a period of radical city expansion in the late 1960s-1970s; and the post-revolutionary period (1979-present). In the following, the interventions and policies that were applied during these periods will be explained in detail

Zand Dynasty

As explained in the first section, during this period, Iranian cities experienced changes to key elements of the city, including the city wall, royal palaces and designated army areas (Arg), the bazaar and major roads, mainly under the guidance of the ruling power. Other smaller but significant elements, such as schools, mosques, caravanserais and service complexes, were constructed by merchants and rich individuals. These individual developments have more organic spatial structures compared to those which were designed by rulers or larger agents (Batty and Longley 1994). Safavid Isfahan is a perfect example of royal influence on Iranian city planning, but it is not the only case.

The Zands in Shiraz continued this tradition with their urban renewal plan. Shiraz was the capital of the Zand dynasty in the eighteenth century. Karim Khan Zand, inspired by earlier plans by Shah Abbas for Isfahan, decided to improve the physical appearance of his capital to make it rival Isfahan (Lockhart 1939, Clarke 1963). He introduced an ambitious redevelopment plan in Shiraz which consisted of a square with a huge walled citadel, a palace and a complex including a mosque, bazaar and public baths (Scarce 1991). In the northwestern part of the existing city a large number of monuments were also built along a new linear axis.

As mentioned above, these autocratic developments can be easily distinguished because of their unique geometric design and spatial arrangements (Kheirabadi 1991). On the authority of the king, these developments moved the old socioeconomic centre of the city to a newly built centre (Clarke 1963, Habibi 1996). Although the main centre of the city was transferred to the newly built areas, the new developments left the

traditional structure of the city intact, which helped to preserve the integrity of the city and its organic physical unity (Izadi 2008). Lying adjacent to the old fabric, a transition zone connected the old and the new.

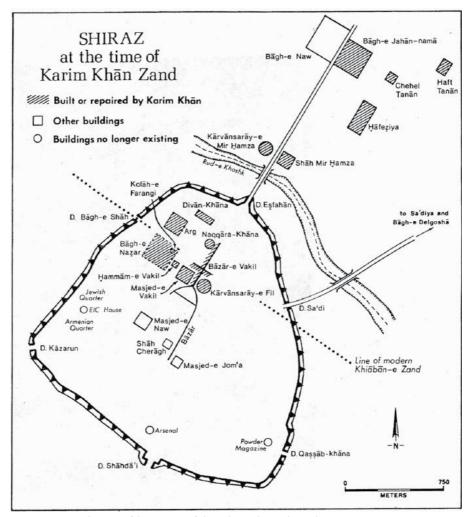


FIGURE 2.23 Development of the structure of Shiraz during the Zand period Source: (Perry 1979, p 273)

Modernisation interventions (1920-1941)

After the Zand dynasty, Shiraz did not experience any large-scale intervention until the 1930s. The establishment of new industries such as the building of an electrical power

station in 1930 and the opening of a spinning and a textile factory in 1936 and 1937 respectively were the first signs of industrial development of the city, which resulted in employment and population growth in Shiraz (Ashraf 1999). The street widening act of 1933 authorised municipalities to widen narrow passageways in the historical core. This led to two new east-west streets being imposed on the historical urban core of Shiraz as a first act of modernisation, resulting in the destruction of some branches of the bazaar. These newly built streets became the main development route of the city core towards the west. Like most Iranian cities, a ring road was also built along the old city wall, which isolated the old city from the modern city. The city centre was gradually abandoned by the middle classes in favour of the newer districts and fell into rapid social decline (De Planhol 1970).

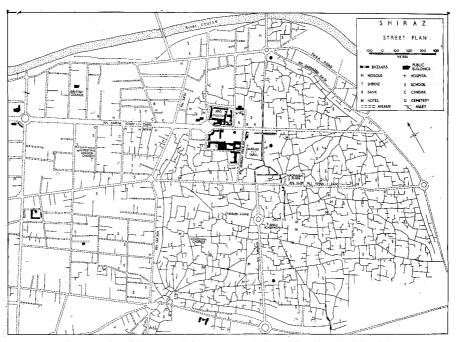


FIGURE 2.24 The Street Plan of Shiraz. The difference in morphology of the old city (right) and the new expansions and its street network(left) can be clearly seen.

Source: (Clarke 1963, p 19)

In summary, during this period the process of change in the urban structure of Shiraz involved the imposition of a western-style grid on the traditional urban structure and the isolation of the urban core by new avenues, the construction of a ring road around the old urban core, the construction of new quarters along several new westward avenues and the growth of the city according to the new development grid (Clarke 1963). The figure above illustrates the streets superimposed on the traditional city

core, the development of the city beyond its old borders and the contrast between the morphology of the old and the new parts of the city.

City Expansion (1941-1979)

The increase in the price of oil during the 1960s and 1970s accelerated the pace of industrialisation and modernisation, which led to the growth of the population and the migration of the rural population to cities to join the new labour force. The total population of Shiraz increased from 170,659 in 1956 to 425,813 in 1976. In addition to industrial investment, tourist developments, in the form of a new airport, university activities, the improvement of regional roads, the 2,500th anniversary of the Persian Empire and the annual international art festival of Shiraz all contributed to the expansion and modernisation of the city during this period (Ashraf 1999).

In 1956, the old and new parts of Shiraz were approximately equal in area; however, the old city contained at least ¾ of the total population²¹ (Clarke 1963). This suggests that despite the expansion and development of new districts after the first period of modernisation, the historical districts still played an important role in the social and spatial structure of Shiraz. However, its social and spatial role declined increasingly in the late 1960s due to the rapid expansion of the city and the physical deterioration of the city core, which suffered from social and economic decline.

POPULATION	1956	1966	1976
Iran	18,954,704	25,788,722	33,708,744
Shiraz	170,659	269,845	425,813
Growth rate	-	4.6	4.7
City centre	97,400	118,750	127,000
	57%	44%	29.83%

TABLE 2.2 Population growth during 1956-1976 (Iran-Shiraz-the city centre). Source: Iran Statistics Centre

The new master plan for Shiraz emphasised the linear expansion of the city towards the east and the west, which resulted in urban sprawl during this period. The land area of the city, which was 2,200 hectares in 1966, was proposed to be expanded to 8,200 hectares by 1980 (University-of-Tehran 1972). The historical core gradually became

a minor part of the sprawling city, further contributing to the decline in its physical, social and economic significance.

Although the old city was neglected entirely in some city plans during this period, at the end of the 1960s the need for specific plans for the historical city centre became apparent. As a result, a detailed plan for the historical core was specified in the third stage of the master plan for Shiraz in 1974, with a particular role defined for the core and its historical structure acknowledged (Falamaki 1978). Although most of this detailed plan was not executed because of a lack of financial resources and appropriate legal system, this was the first official plan for a historical core in Iran.

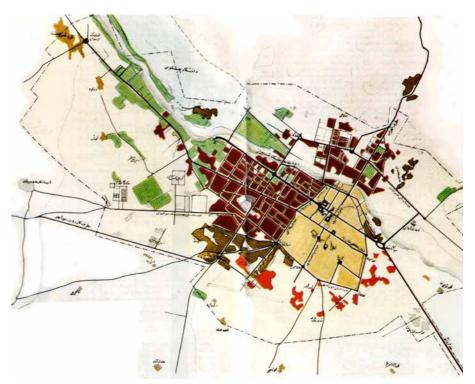


FIGURE 2.25 Strategic plan for revitalising the historical urban core of Shiraz. The historical core is shown in yellow. Source: (Falamaki 1978)

In general, during this period the wealthy continued to build their new houses in the northwestern part of the city and abandoned their houses in the historical districts, while the less prosperous and immigrants concentrated in the city centre and its historical houses. The spatial changes in the old city, as well as the breakdown in its social structure, multiplied the distress and deterioration of the historical urban core.

The Post-Revolutionary Period

According to the National Statistics Centre, the population of Shiraz increased considerably between 1976 and 1986 (almost doubling in 10 years). External factors such as immigration from villages and smaller cities to Shiraz, war-related migration and refugees from Iraq and Afghanistan all influenced population growth.

POPULATION	1976	1986
Iran	33,708,744	49,445,010
Shiraz	425,813	848,289
Growth rate	4.7	7
City centre	127,000	78,224
The percentage of city centre population to the whole city	29.83%	9.22%

TABLE 2.3 Population growth since 1976 (Iran-Shiraz-the city Centre)

Source: The National Census of Population and Housing

Although the Islamic Revolution was triggered by a conflict between Western modernisation and traditional societal values (Ansari 2003), strong elements of modernisation in both social and political institutions, as well as in the built environment, were introduced and implemented after the revolution (Madanipour 2003).

A few locally based regeneration activities which had been started in the first years after the revolution were soon neglected and replaced with a series of large-scale state-led renewal projects. The dominant approach towards urban development plans continued along the previous path mainly because professionals and architects of the time had studied and trained in modern Western universities during the 1960s and 1970s (Madanipour 2003).

During this period, Shiraz faced unstructured urban development because of the inefficient urban management system and population growth. In the 1980s, a new master plan was prepared to deal with the rapid growth of the city, emphasising the linear expansion of the city towards the northwest and southeast as well as reducing activities in the city centre. The historical city core in this master plan occupied 6.66% of the whole city area, while more than 35 surrounding villages were included in the city borders. A plan for a new town and a series of land development plans which were

introduced in 1985 were also implemented to solve problems related to population growth and a housing shortage in Shiraz ²².



FIGURE 2.26 Shiraz master plan, the existing urban fabric and suggested land-use plan except for the historical core. Source: Naghsh-e Jahan Pars Consultants (1998)

A new road-widening plan was introduced in 1985 as part of an urban regeneration and improvement policy (Ravan bakhshi) to make the historical core more accessible to cars and emergency services. In addition, a new planning framework for the historical centre and a legal system to facilitate development activities inside the

These plans included Sadra new town (1989) in the northwest of Shiraz on 2,300 hectares, with a designated population of 230,000, and land development plans for Bazin on 238 hectares and Miyanroud on 140 hectares. For more information see: Azizi, M. M. (2000). Tahlil-e Farayand-e Shahri-e Doran-e Moaser-e Iran (Process of Contemporary Urban Development in Iran). Tehran, Univesity of Tehran.

urban core were laid down (Izadi 2001). The proposed planning framework consisted of a range of projects and interventions that were believed would improve the quality of the historical core if implemented (Tavassoli, Mansouri et al. 1989). However, the government's encouragement of housing development in the newly built areas, as well as difficult construction conditions in the historical neighbourhoods, discouraged investment in the old core and widened the social and economic gap between the modern and the old parts of the city (Daneshpour 2005).

In 1990, another comprehensive plan for the city centre was prepared by the Ministry of Housing and Urban Development. This plan focused on revitalising the functional, historical, spatial and economic role of the old city centre within the existing city (Naghsh-e-Jahan-Pars 1993). Apart from the general conservation framework for historical quarters and defining the boundary of the historical core, two large historical districts (Moordestan and Astaneh) were designated as special redevelopment zones. The Karim Khan complex was also designed as a flagship project with an emphasis on the revitalisation of the historical buildings and the improvement of public space (Naghsh-e-Jahan-Pars 1998).

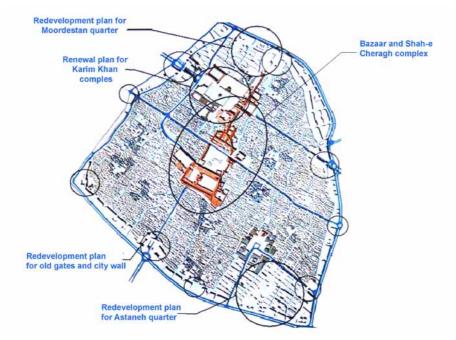


FIGURE 2.27 Illustration of the comprehensive plan for the historical core of Shiraz Source: (Naghsh-e-Jahan-Pars 1993)

It was necessary to create a detailed plan in order to define the implementation of development policies in the historical district. The detailed plan was prepared between

1994 and 1997, but disagreements between the Cultural Heritage Organisation and the Shiraz Housing and Urban Development Organisation delayed the authorisation of the plan.

The redevelopment programmes for the Astaneh and Moordestan districts were also drafted as a part of the brownfield redevelopment policy of the second five-year national development plan in 1994.²³ The main objective of these programmes was to restructure the spatial arrangement of these areas and increase their density by replacing the obsolete buildings with modern and functional housing units. To execute the plan, 7.57 hectares of the historical fabric of Moordestan and 9.2 hectares of the Astaneh quarter were to be demolished. The land purchasing programme was completely compulsory and the role of the residents and local authorities in decisionmaking, planning and execution was ignored. However, lack of financial resources and legal obstacles relating to land ownership made the process of land acquisition impossible. The projects were abandoned for a period of three years, from 1995 to 1997, creating various problems for the remaining residents, as properties that had been acquired and/or vacated were taken over by the homeless and addicts and transformed into a centre of crime within the neighbourhood. At the same time, the remaining owners were not allowed to sell or construct their own properties due to the planning framework defined by the comprehensive redevelopment plan. This freezing of policy resulted in more social and economic problems for residents, as well as further decay and deterioration of the physical environment.



FIGURE 2.28 Redevelopment plan for the historical area in the Moordestan quarter (left) and the Astaneh quarter (right).

Sources: (Naghsh-e-]ahan-Pars 1993, Safamanesh and Monadizadeh 1999)

In this period, a 'Neighbourhood Redevelopment Plan' for 273 hectares designated as obsolete or derelict within the historical city centres was introduced. This legal framework legitimised direct intervention of public development agencies which were also financed through a public budget.

After the implementation of a self-funding policy for municipalities, the Municipality of Shiraz looked for new resources to cover its costs. Apart from its then current sources of income, the municipality decided to allow additional development for a fee (Azizi 2005). Most of the housing development projects were located outside the historical core, and as a result the impact of this policy was not very obvious in the historical residential areas. However, the mayor of Shiraz (copying Tehran's municipality policy in the Navab²⁴ project) introduced a comprehensive development project for the Shah-e Cheragh district in 1994 to increase the municipality's income from the added value of the properties. The new project (named Bein-al Haramain) was designed to connect two religious shrines in the region (Alaeddin Hossein and Shah-e Cheragh). Despite some opposition, the municipality was determined to execute this project and purchased and demolished 4.95 hectares of the historical core during 1995-1996. This created a new axis, which was a broad straight street 450 metres long and 110 metres wide between these two shrines. The reorganisation of the area provided an opportunity for the construction of modern commercial complexes, hotels and other lucrative investments, while ignoring the local cultural and architectural heritage values of the neighbourhood. This ambitious project has been at a standstill for some years because of disagreement between the municipality, the Cultural Heritage Organisation, religious foundations and residents.



FIGURE 2.29 Comprehensive redevelopment scheme for Bein-al Haramain in Shiraz which was initiated in 1995-1996. Left: Aerial photo from 1996, source: Iran Surveying Organisation. Right: Pardaraz Co., 2003

"In 1994, the municipality of Tehran initiated a redevelopment scheme in south-west Tehran in which an existing narrow street (Navab) was to be widened to 45 meters and extended through some old dense fabric of the town, linking the street to the network of roads in west Tehran" (Izadi 2008, p 139).

The comprehensive redevelopment scheme for Bein-al Haramain was not an isolated case imposed on the historical urban fabric during this period. Two other redevelopment projects were also carried out by religious institutions in the historical core of Shiraz on the Shah-e Cheragh and Alaeddin Hossein shrines. These two shrines are the most important pilgrimage destinations in the Fars Province and attract thousands of pilgrims annually. This large number of pilgrims places a huge amount of pressure on the neighbourhood, as facilities and enlarged spaces are required to cater for them. The religious authorities responsible for these shrines wanted a large-scale development plan to provide larger open space around the shrines, as well as provide modern facilities and redevelop the old structure of the shrines.

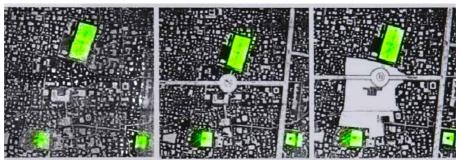


FIGURE 2.30 The progressive clearance of the historical fabric of Shiraz city centre in the context of successive urban interventions around the Shah-e Cheragh (Mir Ahmad) shrine Source: Emko Consultant, 1979, pp. 123-125

These two foundations did not face any financial restrictions as they were supported by the religious authorities, particularly after the revolution²⁵ and this enabled them to manage large-scale redevelopment projects. Two very ambitious plans were carried out for the enlargement of the Shah-e Cheragh and Alaeddin Hossein shrines between 1990 and 1996. These two large-scale redevelopment schemes included the demolition of a considerable number of surrounding buildings to provide larger open space around the shrines. The prime objective of these plans was to integrate

Before the revolution, their main sources of income were Waqf properties (endowed lands and properties), donations given by pilgrims and other voluntary donations. After the revolution, these religious centres benefitted from special privileges, such as tax exemption, easy access to state loans and credit and involvement in profitable projects.

Source: Betteridge, A. H. (1985). Ziarat: Pilgrimage to the shrine of Shiraz. Department of Antropology. Chicago, Illinois, The University of Chicago, Adelkhah, F. (1999). Being Modern in Iran. London, Hurst & Co, Saeidi, A. A. (2004). "The Accountability of Para-governmental Organisations (bonyads): The Case of Iranian Foundations." Iranian Studies 37: 480.

the shrines into the adjacent fabric. However, in practice, large-scale commercial development and improved traffic flow and vehicular access were considered the main priority. The huge enlargement of the shrines caused serious damage to the original structure of the old shrines as well as the spatial structure of the historical urban fabric surrounding them.

In all of these large-scale development projects, whether initiated by the central government, municipality or religious foundations, most of the plans required building over the historical core without consideration for the heritage value of the context. A break with the past, a tendency towards modernity and 'the desire to create strong visual effects to represent authority and supremacy' are clear in their approach as well as in design and execution (Izadi 2008, p 143). The image below illustrates the expansion and transformation of Shiraz during the four periods mentioned.

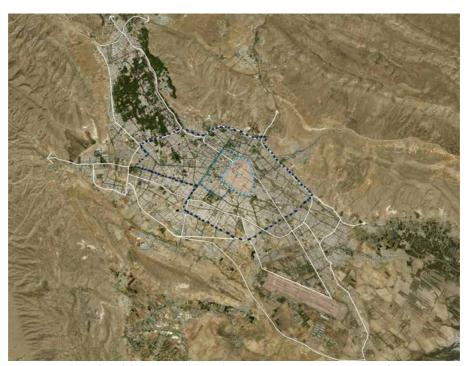


FIGURE 2.31 The borders of Shiraz city are illustrated in this map. Previously mentioned transformation periods are highlighted with different shades of blue to show the expansion of the city. Different shades of blue from light to dark show: Zand dynasty in the eighteenth century, First stage of development until the 1940s and expansion of the sprawling city until 1979. The current city boundaries.can be seen in the picture too. This map is produced by the author on the basis of a Google Earth map from 2014 and using Figures 2.23, 2.24 and 2.25.

§ 2.3.2 The Decline of the Historical Core of Shiraz and its Major Problems

The historical core of Shiraz is a valuable part of the city because of its great potential for tourism, but also because of the administrative and cultural functions and heritage that it encompasses. However, an overview of the major transformation periods reveals that the historical core of Shiraz has lost its importance due to social, cultural and economic changes occurring over the last century. The transformation of the historical urban core into a minor part of the city as a whole, as a result of rapid growth of the sprawling city as well as physical decay and the movement of middle and upper income households to modern areas, increased the vulnerability of the old urban core. At the same time, large-scale redevelopment projects by the central government or local powers imposed a new force of change on the historical core (Izadi 2008). Despite the above-mentioned problems, including shortcomings in providing a liveable and vibrant environment for residents and visitors, the city centre still plays an important role in the cultural, religious and economic life of the city as a whole. Nevertheless, the historical urban core stands in stark contrast to the newly developed areas with respect to the following issues (Clarke 1963):

- Population density: despite the older and newer parts of the city covering the same amount of space, the population of the old city is only one-tenth of the total population.
- Social segregation: residents in the old areas of Shiraz are often working class or unemployed, and less educated than the residents of new Shiraz. This results in significant social segregation, largely based on income and social status. According to a report in 1993, 96.5% of the residents of the old city were from low-income families (Naghsh-e-]ahan-Pars 1998).
- Public buildings and infrastructure distribution: all of the cinemas, main hotels, major hospitals and the University of Shiraz are found in new Shiraz, while the old city has dozens of mosques and religious schools as well as some traditional public baths, but no facilities that cover the daily needs of the inhabitants (Clarke 1963, pp 15-23). The morphological contrast between the old and new quarters is also significant. These extreme morphological changes occurred after the first period of modernisation and led to the movement of the original residents and households to the new areas and the settlement of the working-class immigrants in the urban core. This change had some negative consequences, such as poverty, crime and social segregation (Karimi 2000).

These problems made the old core an undesirable place to live, especially affecting the decisions of people who could afford to pay more. At the same time, the inhabitants of the old quarters have had little interest in the conservation and restoration of the buildings in which they live because they cannot afford to do so. Moreover, most residents are in a financial and educational position such that they do not appreciate

the heritage surrounding them. This also means that they are willing to forsake this heritage at the first opportunity for more modern housing (Izadi 2008).

The isolation of the historical urban core from the modern city has also resulted in a change in the land-use pattern. Commercial activities have invaded residential areas, with property in low-quality residential areas often sold to retailers and wholesalers for storage or rented to immigrant workers who have no interest in preserving and taking care of the heritage buildings in which they live. Spatial change accompanied by social segregation and poverty has thus accelerated the decline of the historical core.

The major problems facing the historical city core, according to its residents, are summarised in the table below, as presented by the Naghsh-e Jahan Pars report of 1993 (Naghsh-e-Jahan-Pars 1993):

MAJOR PROBLEMS	PERCENTAGE
Prevalence of addiction	22.4
Lack of adequate public utilities	21.8
Poor physical conditions	18.2
Environmental pollution	11.4
Functional disorder	4.9
Safety issues: fear and anxiety about safety and security	4.2
Presence of Afghans	3.3
Social disadvantage and disorder: crime, robbery	2.3
Others	6.4

TABLE 2.4 Residents' opinions about the major urban problems facing the historical city centre of Shiraz Source: (Naghsh-e-Jahan-Pars 1993)

In addition to the detailed Shiraz master plan, which has never been approved, the 'various ranges of involved development agencies have different regulatory frameworks which support the area of their responsibility, but may constrain other agencies' activities' (Izadi 2008, p 150). As can be seen from Figure 2.21 in the previous section, the institutional fragmentation and lack of coordination between these agencies has reduced the efficiency of their efforts to regenerate and rehabilitate the historical core. In addition to developments at the national and local levels, ²⁶ various religious powers, such as the Imam Jom'e (representative of the Supreme Leader) or the authorities of endowment organisations, foundations or religious centres, can also

Such as the Ministry of Housing and Urban Development, the Ministry of Interior and Planning, the Cultural Heritage and Tourism Organisation and the Management Organisation at the national level and Shiraz municipality and the Urban Development and Revitalisation Organisation at the local level.

be mentioned as centres of power which have played a greater role than the official administrative body. Two religious institutions, the Astaneh Shah-e Cheragh and the Astaneh Seyed Alaeddin Hossein, are among these agencies, all of whom have their own demands, priorities and ideas about dealing with the problems of the historical urban core, leading to a further decrease in efficiency of local urban management (Izadi 2008). These regulatory and ownership obstacles, as well as social segregation and the unattractiveness of the urban core, have reduced public and private investment, especially in the residential areas (Karimi 1998).

The table below categorises the major causes of urban problems in this area on the basis of this discussion of the city centre of Shiraz.

MAJOR CAUSE	RESULTS IN THE FOLLOWING PROBLEMS
Physical and structural unattractiveness	Abandonment and isolation
Functional inequality and land-use pattern transformation	Low-quality residential areas; using residential areas as storage for retailers and wholesalers
Legal and official obstacles	Limitation, slowing or even stopping of rehabilitation and redevelopment plans
Social segregation and poverty	No tendency towards conservation and protection of heritage, reducing the desirability of the area for the middle classes
Lack of financial support and complexity of land ownership	No investment in residential buildings by Private sector
Centralisation and the challenge of urban management	Various responsible agencies working in parallel as well as religious powers and foundations

TABLE 2.5 Major causes of urban problems in the historical core of Shiraz Source: author, according to comprehensive plan report (Naghsh-e-Jahan-Pars 1993)

This chapter introduced the context of the research presented in the remainder of this thesis, looking at Iran at the national level and Shiraz as a case study. This comprehensive study of the development/redevelopment and expansion of Shiraz can assist us to understand the pressure placed on its historical core. This chapter has revealed that urban transformation was initiated by a strong tendency towards reshaping the traditional urban area through large-scale redevelopment projects that entailed a radical break with the past. However, during more recent decades, the emphasis on modernisation has led to the decline of the historical core, which has suffered from depopulation, extensive physical decay, several legal obstacles, a lack of investment, high crime rates, poverty, social segregation and insufficient institutional coordination and urban management.

The sprawling expansion of Shiraz once again changed the city's shape between 2000 and 2005. However, growth in this period cannot be considered a classic case of urban sprawl as it was accompanied by the conversion of large areas of green land into built-

up districts (Figure 2.32). This suggests there will only be increasing pressure on the historical urban core in the future, due to expansion limitations and increasing land values.

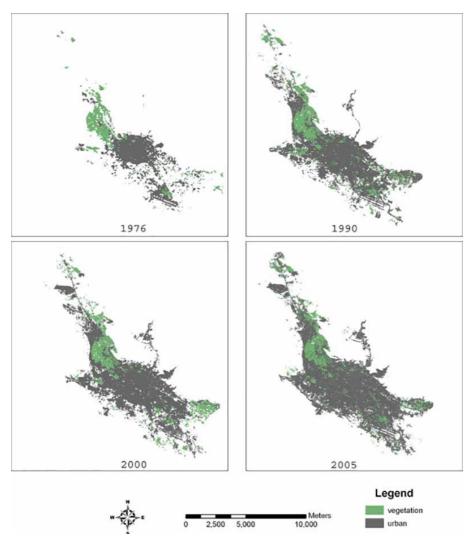


FIGURE 2.32 Integrated urban growth and vegetation map of Shiraz for 1976, 1990, 2000 and 2005 Source: (Sabet Sarvestani, Ibrahim et al. 2011)

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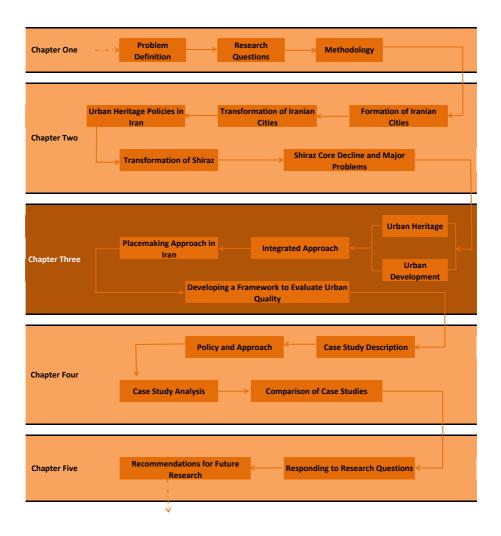
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3 Content



§ 3.1 Introduction

This chapter forms the main theoretical background of this research. It covers the main relevant studies and theories on urban heritage and its value as well as the necessity of urban development and change in urban areas. The benefits and challenges of preserving urban heritage and related references are discussed to reach a reasonable and sensitive approach towards urban heritage. On the other side of the spectrum is urban development, which focuses on urban growth and the need for new functions. Urban development embraces the process of change and converts urban areas to support these new conditions. In this process, urban heritage used to be considered as an obstacle for progress and further development. On the other hand urban development and change were considered as a destructive force against heritage.

The balance between heritage preservation and urban development can only be met by developing an integrated approach to help urban heritage play an active role in urban life with respect for its history. If historical urban areas want to play an active role in contemporary city life, it is vital for them to adjust to their changing surroundings and societies. On the other hand, urban development with no respect to historical values of urban heritage will result in loss of identity of our cities and our links to the past.

This chapter tries to look for an integrated approach in available urban design theories and different lines of thinking. Placemaking is considered as a merging product of social and physical theories and focuses on improving the neighbourhoods of urban areas by reinventing public spaces as the heart of every community. However, promoting a universal kind of public space with universal criteria cannot work for all contexts and cultures. Therefore in this chapter traditional elements of Iranian cities are used to extract relevant criteria of quality measurement in Iranian cities. A major component of this is an intensive study of urban characteristics of the bazaar and related public spaces. The result of this chapter is a quality framework which will be tested and improved by analysing case studies in the next chapter.

§ 3.2 The Value of Heritage

The term "heritage" is defined by most urban designers, planners and even urban authorities as a label for monuments, ranging from single palaces, religious and public buildings to historical cities and citadels. This definition often excludes historical residential areas and city centres which equally represent urban heritage. In addition to these physical structures, there are also intangible elements of urban heritage such

as customs and beliefs which play a role in the creation of sense of place and identity in built environments (Steinberg 1996).

Historical urban cores embraces both the material or tangible historical environment and the intangible heritage, including the collective memory of communities embodied in historical places (Ashworth, Graham et al. 2007). The tangible historic resources of towns are the form and design, both formally planned and more incremental informal aspects. The intangible heritage of cities includes the activities that are hosted in the urban environment such as festivals, performances and traditional work practices, but also the collective memory and the shared 'sense of place' that arises from the history of the town. The connection between the physical form of towns and their place identity is generally very strong. "Sense of place is created and maintained by the physical form of the built environment as well as its ensemble of symbols, icons and embodied values which lend meaning to a place because of the connections with layers of history" (PICH project²⁷, 2016).

The term "urban core" is being used by various academic researchers such as geographers, economists, political studies researchers and psychologists. However, doubtfully they are all talking about the same geographical area or historic period. In some disciplines urban core means the area around a central business district (CBD). It might also be used to indicate an area with a large density of historical buildings or a mix of various activities. Max Weber defines the core of the city as a market place where economic products are exchanged, produced and/or consumed (Weber 1956). In this respect, the urban core is defined as a place where the intensity of life is tied primarily through economic activities (Corniere 1966). The economic definition of urban core is the only definition that leads to a measurable concept and is usually studied according to land value, daytime population, permanent residents or even the number of pedestrians.

The Council of Europe defines urban cores as historical places and areas with significant cultural and heritage assets (Council of Europe 2006). The core of the city is a node, a crossing point of all kinds of people, of the activities of various groups; it is a commuting centre for clerks, a leisure centre for pleasure seekers, a shopping centre for housewives, etc. It is a place where different kind of people come together (Prokop 1966). The definition of Georg Simmel goes further than Weber's economic definition and points to another function of the core of the city: the core of the city is a "market"

The PICH project aims to provided a much-needed development of the state of the art on the impact of wider forces on the management of the urban cultural heritage in the context of the different mix of models of urban planning found in the four case study countries (UK, NL, IT, NO) The project is funded under Heritage Plus Joint Call. for more information go to: https://planningandheritage.wordpress.com/pich-2/place-identity/

place" of social activities, a place where norms, values and activities of different groups are exchanged (Simmel 1908).

The definitions and characteristics of urban cores are different in various parts of the world, depending on their economic power, cultural and religious characteristics and structure of society. However, economic and social activities that are mentioned in international discourse play a significant role in the spatial structure of Iranian urban cores.

In Iranian context, an historical urban core is defined by the area of the old walled city. The city walls were pulled down during the first decades of the 20th century to give way for city expansion and are mostly replaced by ring streets around the urban cores. The traditional Iranian cities are concentrated and homogeneous in their buildings, combining diverse land uses in a tight relationship with each other. The bazaar complex and its related spaces form the centre of public life where all public and social activities took place (Ardalan and Bakhtiar 1973).

Therefore, we can say that collective social understandings of the past are held in the physical heritage (Holtorf 2002) and, conversely, the intangible cultural heritage is a lens through which the built historical environment is viewed (Deacon 2004). In this sense, the heritage is a social construct; it is the way that people interpret and use the past which is shaped by contemporary social, economic and environmental conditions (Lowenthal 1998, Graham, Ashworth et al. 2000, Peckham 2003, Smith 2005). The urban fabric in historical urban cores are currently widely valued and protected in most developed countries; both for the value of historical buildings as well as for their recognised value in contributing to the collective identity and place identity of the community (McCabe and Stokoe 2004, Lewicka 2008, Murtagh, Graham et al. 2008, Pendlebury, Short et al. 2009, Murzyn-Kupisz and Gwosdz 2011).

If heritage is 'an aggregation of myths, values and inheritances which are determined and defined by the needs of societies in the present '(Ashworth and Graham 2005), then what is the suitable approach towards historical urban cores as a collection of urban heritage? In other words: to protect or not to protect? And what are the advantages and disadvantages?

There is much literature discussing the approach towards urban heritage. Bever believes that the most significant advantage of protecting the historical heritage of a city is economic. Creating employment opportunities, promoting commerce and attracting tourism industry are some of the main economic advantages. In addition, he argues that in most cases the cost of rehabilitation and preservation of a building is less than constructing and planning a new one (Bever 1983).

Stripe adds another benefit of heritage revitalisation initiatives: the psychological benefits. He argues that we like to preserve the historical environment firstly because they are our only physical link to the past. With developments in technological and communication abilities and cultural homogeneity, the need to preserve our connection with the past is more sensible. Stripe believes preserving historical environment and sites promotes sense of honour and identity of a nation and makes people proud and satisfied simply because of their intrinsic value as art (Stripe 1983).

Zerubavel argues that people see historical environment as a bridge between the past and the present as they are not entirely separate bodies. The historical structures which remain stable or even continuing their functions act as a reliable source of identity and nostalgia and often serve as major centres of personal as well as collective memory (Zerubavel 2003).

Lowenthal justifies the he efforts to preserve those parts of the city that provide us with a link to the past especially in western and developed societies. In these societies, people live longer and are more mobile therefore they seldom remain in contact with the things and spaces they grew up with. This increases their interest in history and their tendency to preserve the last recognisable elements and sites (Lowenthal 1985). "The historical urban core gives the opportunity to make contact with previous generations and step in the footsteps of ancestors" (Toorn-Vrijthoff 2011). Kotkin explicitly refers to historical environments as a source of sense of place and history in a society which experience constant change and transformation: "As centres of arts and culture, repositories of our past history and architecture, the core retains a powerful tug of consciousness. It reminds us not only who we are but also what we have been" (Kotkin and Elleman 1999).

"Historical city cores are analogous to the forms of nature and as vital forms they have within them the heritage of their past and the seeds of their potential future" (Kermani and Luiten 2010). Many scholars believe that the historical urban cores are psychologically comfortable and their embodied value and meaning acts as a trigger to evoke memory. Florida argues that educated and creative classes of population value the historic character of cities more because they satisfy craving for authenticity and identity, but this effect is by no means limited to one group of people (Florida 2002). Cultural and culinary facilities in the setting of a historical urban core are much more widely appreciated and are more valuable than the same facilities in a newly built cultural centre (Sanagata 2002). Lowenthal and Kotkin refer to the historical urban core as a storyteller which connects people with the past to satisfy their longing for a feeling of identity (Lowenthal 1985, Kotkin 1999). The historical urban core is a bounded entity with unique and historical continuity, a cosy place of rest and defence against the dangerous and alien 'outside' (Relph 1976, Tuan 1977) and at the same time is a source of potential social interactions (Milligan 1998).

The above literature and reasoning convince us to protect and respect heritage but we should have in mind that historical urban areas are not necessarily worthy of revitalisation simply because they are old. It is Tarn's view that while there are merits to including social value and factors when appraising cultural inheritance, these should not dictate all aspects of the future well-being of towns and cities (Tarn 1985).

§ 3.3 The Necessity of Development

Urban transformation was very slow before the birth and growth of the modern movement in architecture and urbanism. Under the influence of modernist ideas old urban fabrics experienced a significant structural transformation with commercial, economic, social and cultural changes. Modernists felt that contemporary cities were not responding radically enough to the challenges of the Modern Age; "the magnitude of the problems suggested that great transformations are necessary" (Charter of Athens, from Conrads, 1964, p 140). There was a sense of a radical break with the past, as the past was seen as a "hindrance to the future" (Tiesdell, Oc et al., 1996, p 48). During this time large scale transformation plans or modernisation began across Europe and soon prevailed all over the world. These schemes involved the modernisation of the pre-existing urban structure of a historical centre by means of cutting wide and straight avenues through densely built-up quarters. Cavalcanti argues that this type of intervention, which began in the second half of the nineteenth century, "has often been associated with political regimes sharing a highly centralised structure of power (autocratic regimes), whereby policy is determined and executed by government unrestricted by any legal or social institutions" (Cavalcanti 1997, p 71).

The implementation of modernist schemes had radically changed major centres of cities across Europe. During the 1950s and 1960s comprehensive redevelopment of large sites was the dominant trend towards historical city cores rather than rehabilitation and refurbishment (Tiesdell, Oc et al, 1996). This policy was soon followed by slum clearance programmes. These policies which were augmented by inner-area road building schemes were implemented by reconstruction and replacement of the physical "problems" of the past (Roberts, 2000) and were considered as national priorities. Also a new group, traffic planners, came gradually on the scene with their ideas and theories on how to ensure the best conditions for car traffic (Gehl 2010). Neither the city planners nor the traffic planners put urban space and city life high on their agenda. The end of the 1960s marked a significant turning point as policies began to shift away from large-scale redevelopment/clearance and road building schemes towards revitalisation and area improvement (Couch 1990, Tiesdell, Oc et al. 1996, Roberts 1998, Roberts 2000).

A new wave of scholars (The Death and Life of Great American Cities by Jane Jacobs (1961), The Urban Villagers by Herbert Gans (1962), and The Federal Bulldozer by Martin Anderson (1964)) criticised modernist planning and provided planners with evidence of the failure of their policies. In this period, the value of historical environment was increasingly being recognised which resulted in the emergence of area-based conservation policies. Much of the effort by regional and local development agencies that were established to regenerate the economic base of those areas which have lost their functions, has focused on the objective of attracting inward investment.

Despite many positive effects such as promotion of quality in the built environment, increasing employment in construction-related activities and attracting inward investment, A variety of literature from commentators including Ambrose (1986), Parkinson (1989), Turok (1992), Healey (1992), Cameron (1992), Robson et al. (1994), Healey (1995) and Roberts (2000) criticised this approach and concluded that the needs of deprived inner urban area residents have been ignored.

In Iranian context, the process of urban transformation and city expansion is more severe and is increasing dramatically since the first years of 20th century. The need for urban development and city expansion was always there but earlier periods of transformation were slow and gradual and more restricted in size. The modern transformations on the other hand were large scale and destructive and were carried out by an authoritarian government. The modern life style has resulted in destruction of the traditional structure of cities to make space for new development areas and car traffic.

Even though the policies towards historical cities have changed at both international and national level, development and change in the cities is seen as an inevitable fact or even a need and necessity. New life style and modern facilities are seen as a vital element in historical urban cores for both private and public life. There is a great need in providing housing units for the growing population and to provide accessibility and safety for the inhabitants.

From the early 1990s, there was a shift in emphasis towards a more holistic and integrated approach or, in other words, an integration of the economic, social and environmental aspects in a comprehensive approach" (BURA 1997, quoted in Lang, 2005, p 9). At the same time, the protection and enhancement of the surviving historical building fabric was recognised as a valuable ally in this broader process (Pearce 1994).

There is a general consensus that the historical areas are not only striking features of many towns and cities but also assets for their economic and social renaissance. The evidence revealed that urban development in historical context requires a proper understanding of various issues combined with creative approaches based on a mix

of physical, economic, social, cultural and environmental initiatives, combined with holistic urban management.

§ 3.4 The Balance between Conservation and Development

During the 20th century considerable attention has been paid by urban scholars, historians, sociologists and economists to explore, define and explain various approaches towards urban cores. However, developing a unified approach towards solving the problems and improving historical environments has always been a challenging issue. The built environment has been subject to the polarisation between, on one hand, conservation of historical elements, and on the other hand, technology-driven modernisation and development. However, as Worthington argued, the opportunities for revitalising the historical environment requires both conservation and development to keep a unique sense of the historical environment whilst allowing it to flourish, adapt and grow to meet the needs of the 21st century (Worthington 1998, p 177). Before looking for an integrated approach that fosters simultaneously urban development and heritage conservation, it is necessary to study the evolution of approaches towards heritage in literature and international guidelines.

Even though monuments have long been given priority by the world community, the concept of urban approach towards heritage is not very recent. For example John Ruskin, pioneer in the protection of historical monuments, noted the importance of domestic architecture in cities when he argued that the small tenements can be just as important as the palaces (Ruskin 1989, p.182). While Ruskin's focus is on the individual elements with memorial and social values not on the whole, Sitte mainly considers their sum in historic and esthetical values. He introduced an urban approach towards heritage and clearly declared the importance of the urban fabric as a whole for the understanding of the city (Choay 2001).

Charles Buls, a supporter of Sitte's ideas, adds the argument that the demolishing of smaller structures has to be placed within the bigger picture of the city as the immediate context because they might comprise together a value which is not understood separately (Buls 1899). Sitte and Buls provided us with a new objective in urban heritage: the preservation of urban structure and fabric (Choay 1969, pp.115-20).

Some years later this approach became further established by the works and theory of Patrick Geddes. He notes how urban heritage can strengthen urban development: "If town planning is to meet the needs of the city's life, to aid its growth, and advance

its progress, it must surely know and understand its city. To mitigate its evils, it needs diagnosis before treatment" (Geddes 1915, p.295). He preferred to establish a process of local interventions and avoiding any concrete design proposals, as he valued the process over a final image. Altogether, Geddes provided the basis of an integrated, process-oriented approach towards urban development which is now being explored and further developed in the field of cultural heritage management.

Gustavo Giovannoni is credited with the invention of the actual term 'urban heritage', and encouraged the protection of heritage on an urban scale with respect to urban development as he defined a historical city as a monument and a living fabric at the same time (Giovannoni and Ventura 1995). He pioneered the idea of mutually supportive harmonious coexistence, arguing that the correct response is to understand and work with respective, complementary qualities and opportunities of each (Rodwell 2007). From a heritage management perspective, both Geddes and Giovannoni integrate 'heritage management' into the general conception of urban development and both see people as part of the city.

The importance of integrating heritage management into larger policies of planning was first promoted about a century ago by Patrick Geddes in 1915, and the concept can be found reflected in almost every heritage-related international cultural policy document since the 1960s. The emergence of area-based conservation which occurred in most European countries during the same time is also notable. The Netherlands was the first with its Monument Act in 1961 followed by "Loi Malraux" in France and later by UK and Italy in 1967 (Tiesdell, Oc et al. 1996). In the first article of the international charter of Venice, the historical monument is defined as not only great works of art but also more modest works of the past which have acquired cultural significance with the passing of time²⁸.

The notion of an integral and holistic approach towards heritage and urban development is highlighted and the importance of having a balance between the benefits of socioeconomic and urban development on one hand and the preservation of cultural heritage on the other hand is stressed in UNESCO's Recommendation Concerning the Preservation of Cultural Property Endangered by Public or Private *Works* in 1968 (UNESCO 1968). The recommendation suggests legislative and financial measures and procedures for setting and implementing priorities and mauntenance of protective inventories of cultural property.

The Venice Charter sets principles of conservation and preservation and emphasised "on the concept of authenticity and the importance of maintaining the historical and physical context of a site or building. The Venice Charter states that monuments are to be conserved not only as works of art but also as historical evidence" Jameson, J. H. (2014). International Conventions and Charters and Archaeology Presentation. Encyclopedia of Global Archaeology. C. Smith. New York, Springer: 3951.

In 1972, the General Conference of the United Nations Educational, Scientific and Cultural Organisation meeting in Paris declared that "cultural and natural heritage are increasingly threatened with destruction not only by the traditional causes of decay, but also by changing social and economic conditions which aggravate the situation with even more formidable phenomena of damage or destruction". The World Heritage Convention encouraged state parties "to adopt a general policy which aims to give the cultural and natural heritage a function in the life of the community and to integrate the protection of that heritage into comprehensive planning programs" (UNESCO 1972, article 5).

Following that, in 1975 The European Charter of Architectural Heritage of Amsterdam named the policy of protection and integrated conservation as the only solution to save our heritage buildings and cities for the future generation: "historical continuity must be preserved in the environment if we are to maintain or create surroundings which enable individuals to find their identity and feel secure despite abrupt social changes" (ICOMOS 1975). Then, in 1976, UNESCO adopted the Recommendation Concerning the Safeguarding and Contemporary Role of Historic Areas . The Recommendation recognises the importance of the setting—buildings, spatial elements, and surroundings make up historical areas and they should be protected from the damage that can result from insensitive changes that damage authenticity.

In 1987, the International Council on Monuments and Sites (ICOMOS) adopted the Washington Charter for the Conservation of Historic Towns and Urban Areas which addresses issues such as integration of preservation and planning policies, public participation in the preservation process and the social and economic aspects of historical towns preservation (Steele 2009). A good example of this approach can be seen in the Belvedere Memorandum in the Netherlands. The Belvedere program outlines how the national government defined the outline for a reform of the relationship between heritage and spatial planning. The ten years of Belvedere (1999-2009) were an exercise in uniting the heritage sector and finding new, more productive links between heritage and nature management, water management, property development and leisure. The cultivation of a more future-oriented vision of the built and landscape heritage reflected in its seemingly paradoxical slogan, 'preservation through development'²⁹, which called for active intervention rather than just passive protection.

The content analysis of the heritage documents and charters done by Veldpaus, Roders et al (2013) reveals that international charters, conventions and recommendations (since the 1950s) have been slowly evolving from being about explicitly appointed sites

such as historical towns and settlements (1970s and 1980s) towards more general and less defined names, e.g. (historical) urban areas in the 1980s and places and landscapes in the 1990s (Veldpaus, Roders et al. 2013).

In 2011, ICOMOS adopted the Valetta Principles on heritage management. The Valletta Principles stressed on the importance of change and management of change in the new framework of principles, tools and actions for the safeguard of historical cities. The main focus of the Valetta principles is "change as opportunity":": "in a turbulent age, such as the present one, change cannot be avoided, but it should be directed and oriented so that safeguard interventions in historical cities could become the opportunity to increase the citizens' quality of life, improve the quality of natural environment and reduce the vulnerability to the natural and man-made disasters. Therefore change must be managed to guarantee both sustainable development and conservation" (Kolonias 2012, P:11).

UNESCO's General Conference adopted the Recommendation on the Historic Urban Landscape (HUL) in November 2011. HUL is a heritage management approach which is based on various values (natural and cultural, tangible and intangible, international and local) that are layered and interconnected in any city. Furthermore, HUL is focused on an integrated approach to the identification, assessment, conservation and management of historical urban landscapes within a sustainable development framework. Such an approach makes the protection of urban landscapes possible through the protection of their vital social and economic mechanisms in history (Whitehand and Gu 2010).

In conclusion, the future of urban heritage management is becoming more about 'thoughtful change' rather than solely the protection of historical buildings and ensembles. On one hand, it would be hard to imagine our cities without the familiar remnants of our past and a witness to continuity through the passing of time³⁰ while on the other hand, change and development are inevitable part of our cities. In addition to its intrinsic value for present and future generations, heritage can make also an important instrumental contribution to sustainable development and change.

Urban development and heritage conservation were by tradition considered two separate disciplines, each working within their own paradigm to reach their own objectives. The aim of urban development is directed towards improving living and working conditions. Heritage conservation on the other hand wants to pass historical features to future generations. Although the aims differ, the experience shows that both disciplines can profit from each other's efforts and reach better results when

they join forces. It is in urban design that these two disciplines meet. In order to reach a suitable urban design approach towards integrating heritage with change and development, it is necessary to study major trends and theories of urban design.

The word "urban" suggests the characteristics of towns and cities and in some texts is in contrast to the term "rural" (Ricketts, Johnson-Webb et al. 1998), while the term "design" refers to activities such as sketching, planning, arranging and making patterns. However, within the practice of "urban design", both these words have a more inclusive meaning. The word "urban" covers a wider range of built environment from cities and towns to villages and hamlets; while "design" is more about "the process of delivering or organizing development and effective problem solving" (Carmona, Heath et al. 2007). In the late 1950s in North America, the term urban design replaced the outdated term "civic design". Civic design became popular with the City Beautiful Movement and was more focused on the major civic buildings and their relation to open spaces. The field of urban design expanded over the years and aesthetic aspects, the built area mass and empty spaces between buildings were discussed in it. Its main focus however was on public realm and its physical and socio-cultural characteristics. Bob Jarvis described two major trends in urban design evolution. One emphasises more on visible form, which is called the visual-artistic tradition, and the other one mainly emphasises on the experience of people in urban environments and its public use (larvis 1980).

The visual-artistic tradition was built on a narrower and architectural definition of urban design. It was more product-oriented and was mainly influenced by "city planning according to the artistic principles" of Sitte. Le Corbusier was also a key proponent in this tradition. The "townscape" term which was developed in the late 1940s and the 1950s by Gordon Cullen and others emphasised also on the visual dimensions of urban design. The townscape tradition is often regarded as the quintessentially English approach to urban design and design control. In his book, Cullen largely ignored public perceptions of townscapes and places which is in contrast to Lynch's book: "The Image of the City" (Punter and Carmona 1997). Kevin Lynch suggested examining the people's perception and mental image of the urban environment instead of its physical and material form. This makes him one of the most famous scholars of the social usage tradition. Another key proponent of the social usage approach was probably Jane Jacobs, whose book "The Death and Life of Great American Cities" demolished many fundamental concepts of modernist city planning and ushered in key aspects of the post-modern debate. Jane Jacobs argued that: "cities can never be a work of art since art is made by a selection of life while city is life at its most vital, complex and intense" (Jacobs 1961). She destroyed the arguments for a predominantly visual-artistic urban design, although she did concede a role for design in "helping to illuminate, clarify and explain the true order of cities". Her close observation of streets, sidewalks and other public places emphasised urban spaces as

containers of human activity and places of social interactions. She concentrated on the socio-functional aspects of the street, plaza and park.

Christopher Alexander's "A Pattern Language", published in 1977, promotes the concept of "design for people by people". Therefore he rejects top-down approaches in urban design and architectural trends as he find them against fundamental and natural human needs. Alexander included in his books, "Notes on the Synthesis of Form" (1964) and "A City is Not a Tree" (1965) that forms without context is as dangerous as lack of diversity and cross-connection between activities and places. In his book "A Pattern Language", he described a set of patterns which helps designers to have a better understanding of relationships between activities and places (Carmona, Heath et al. 2007). His ideas on community-centric design shaped the core concept of placemaking. In addition, French philosopher and sociologist Henri Lefebvre's philosophy on creation of space in urban design introduced a key concept for the placemaking movement. In 1968, he defined the concept of "right to the city" as an assertion statement against the top-down management and planning strategies which according to him restricted social interactions and relationships in society (Lefebvre 1991). Contemporary critical theorists have borrowed this concept and expanded it to one of the most important social movements. For example, philosopher David Harvey defines the "right to the city" not only as an individual freedom to access urban spaces but also the freedom to make and remake our cities and reshape the process of urbanisation (Harvey 2003).

With recording and analysing time-lapse photography and direct observation of human behaviour, William Whyte tried to determine why people find some spaces good and others not. His observations of human behaviour in public spaces helped to find a link between urban form and the needs and desires of people. This kind of close observation can be also followed in Jan Gehl's studies of public space in Scandinavia. This approach in urban design is called placemaking. Placemaking approach focuses on the design of urban space as an aesthetic and at the same time a behavioural setting. In this tradition diversity of functions creates successful urban areas and physical form supports the activities that take place there (Whyte 1980). It concerns the connection between places and people, movement and urban form and at the same time nature and the built fabric (DETR and CABE 2000, p 8). This tradition tries to look at urban design more as a process and not a product-based discipline and encompasses social, environmental and functional dimensions alongside visual or urban form-based concerns.

In this respect public places can act as a potential for the area and revive the social life. Public places, which are neither our homes nor our work places, are what Ray Oldenburg calls "third places". He believes placemaking can change these third places into the places of social gathering where the community comes together in an informal

way, a place where civic discourse and community connections can happen (Oldenburg 2002).

Placemaking is a multi-faceted approach to the planning, design and management of public spaces. Placemaking capitalises on a local community's assets, inspiration and potential with the intention of creating public spaces that promote people's health, happiness and well-being. This tradition includes the way places work as well as how they look. This approach focuses less on the substance of urban design and more on its creative and problem solving nature, seeking to define the procedures of urban design and emphasising the importance of seeing it as a collaborative process operating at various scales and within various time frames (Buchanan 1989).

The theory of placemaking sees public space as the heart of cities and aims to strengthen the connection between people and the places they share. The fact that place making happens in public spaces is a critical component to its impact on cities. Placemaking as a collaborative process in maximising shared value can be used in heritage context by reinventing public realm as a driver for sustainable development. This line of thinking believes that visual and physical qualities of the space as well as its social and cultural life affect the quality of the urban environment and it is not possible to reach a liveable urban space without considering both aspects in an urban intervention. Even though these two criteria, socio-cultural quality and physical quality, should be considered as two main pillars of any design, what makes public domain a source of life and social interaction in the city is its functional quality and the range of various activities and functions that it gathers.



FIGURE 3.1 Three main pillars of urban design

These three main pillars can be also tracked in international literature. The "physical quality" criterion is mostly evaluated by its position in respect to visual and spatial quality: a city where the design of our buildings and spaces contribute to creating beautiful places for people to enjoy. In Camillo Sitte's book, city planning according to artistic principles (1889) and later in Edmund Bacon's study, the design of cities (1974), the main emphasis is on artistic principles of good form. Some other scholars also admitted the importance of visual qualities and mentioned some other aspects of this principle, such as scale, order, proportion or as general as visual appropriateness (Bentley, Alcock et al. 1985, Nasar 1998).

Just as Sitte and Bacon focus on form and visual characteristics, Cullen and Lynch insist on the sense of place and how people perceive the urban environment. Cullen theorises the serial vision term and how people engage with the built environment as a moving object. He emphasises on the way people understand the place with their sense of sight. Lynch's writings of 1960 on the other hand stress legibility. Legible city is a city whose constituent parts are easily identifiable and are easily grouped into an overall pattern. Distinctiveness and respect to the historical context of the built environment leads to a more legible and authentic space and increases the sense of place for both residents and visitors. Preservation of architecturally and/or culturally distinctive old buildings offers people an attribute of the inner city that is rare in modern parts. It helps the residents orient themselves, place parts of the city into coherent categories and acquire a sense of security that they can relate to the surrounding urban world. In this research these concepts are gathered in the "sociocultural quality" criterion. Historical urban cores are one of scarce environments in modern cities in which the main focus is (or should be) on humans instead of cars. This criterion defines a successful urban area by its respect to people and how they experience the city, giving people priority over cars. The city's modest scale and street grid make walking a pleasant experience. Its historical buildings and doorways provide people with spontaneous places to stand and sit. As Jan Gehl mentions in his book, life between buildings: using public space, where a better physical framework is created, outdoor activities tend to grow in number, duration and scope (Gehl 2011). Pedestrian convenience (air, noise, safety...), equality (needs of residents and tourists balanced), affordable and clean neighbourhood, belonging to a community and participation of residents in the decision making process are also characteristics related to this dimension.

While Sitte, Bacon, Cullen and Lynch focus on physical characteristics and the individual experience and solitary beholder of the environment, Jacobs has a more function related perspective towards city life and emphasises on the vitality of activities in the cities. She believes that street life is an essential factor in a good city and vital streets need "a most close grained density of uses that give each other mutual support". Mix of land use and compactness of the area supports the vitality of the area and encourage people to participate in urban life of cities. In this research, these

factors are included in a criterion which is titled as "functional quality". Functional public places contain high quality, compact, walkable and mixed-use environments that help to reduce the time that people need to travel. Most downtown planners agree that making inner cities more pedestrian-friendly will improve traffic management, economic revitalisation and environmental quality (Brambilla and Longo 1977). A functional place is where people have sustainable transport options that are comfortable, convenient, efficient and affordable. A major problem in inner cities is reaching downtown which includes travel time, inconvenience, traffic congestion, safety anxieties and parking. This criterion can be measured by dependence of inhabitants on automobile, travel time, parking facilities and quality of public transport. Mix of land use and self-sufficiency of the area for daily life is also considered as a part of this dimension.

§ 3.5 Placemaking Approach in the Iranian Context

The concept of urban design in Iran was not discussed in academic circles before 1930 and even after that, the main focus was on transferring western ideas and patterns to Iranian cities instead of investigating and analysing traditional Iranian urbanism and its principles. To make placemaking theories applicable in Iranian context, it is essential to look for traditional urban elements of Iranian city cores and understand their interrelations and evolutions through history. Among Iranian scholars Soltanzadeh (1991), Tavassoli (1990) and Pirnia (1992) have investigated the principles of traditional Iranian urbanism. Even though Pirnia's principles are mainly focused on architecture, some of the principles are sensible on an urban scale. Kheirabadi (1991) and Saoud (2002) have done a very extensive study on significant influential factors on shaping the form of Iranian (and Islamic) cities: physical and climatic conditions, religious and cultural beliefs, as well as social and economic principles (Kheirabadi 1991, Saoud 2002). Habibi (1996) did a comprehensive research on the spatial organisation of Iranian cities during different eras. He defined the Median city as a fortress-city on a hill or high topography, mostly situated on a strategic point. The spatial structure of the city was not completely shaped as bazaar and residential areas were placed outside of the city walls while barracks and royal complex were protected by a few layers of walls.

In the Achaemenid era, trade relations between major cities of the Persian empire and other parts of the world developed due to the existence of major trade routes that were kept safe. For the first time in Iranian history the city became a trade centre and the agricultural-political structure of the city changed to a political-trade settlement. The spatial structure of the bazaar developed as a major element of Iranian cities and acted

as a buffer zone between residential areas and royal residences. Major passageways connected the residential areas to the bazaar structure.

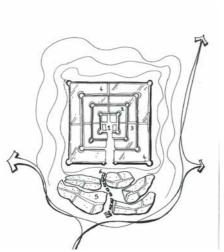


FIGURE 3.2 The schematic structure of a Median city (678 BC–549 BC). 1: palace, 2: treasury and storehouses, 3. Residence of royal family, 4. Barracks, 5:Residential areas, 6: Bazaar.

Drawn by author after (Habibi 1996)

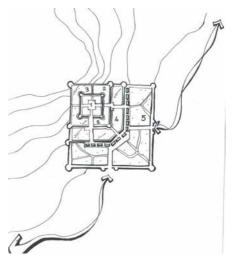


FIGURE 3.3 The schematic structure of Achaemenid city (550 BC–330 BC). 1: palace, 2: Barracks, 3.treasury and storehouses, 4. Residence of royal family, 5:Residential areas, 6: Bazaar. Drawn by author after (Habibi 1996)

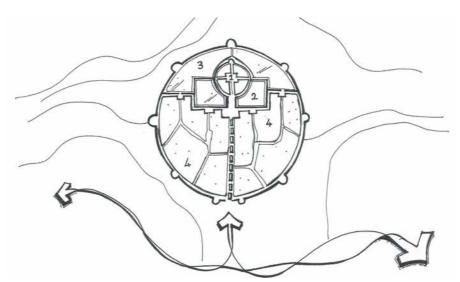


FIGURE 3.4 The schematic structure of a Parthian city (247 BC-224 AD). 1: palace, 2: Barracks and treasury 3. Residence of royal family, 4.Residential areas, 5. Bazaar. Drawn by author after (Habibi 1996)

After the attack of Alexander on Persia, the structure of cities was changed due to the influence of Greek city-state structure. During the Parthian empire, the city structure was shaped under the influence of both Greek and Persian cities. The general plan of a city was a circle while the organisation of the city and its divisions followed the Persian system. The bazaar continued to play a significant role in the spatial and functional structure of the city (Habibi 1996).

In the 7th century and the Islamic ages, the mosque became the main urban space and the city was formed around it. Bazaar as the economic and social centre of the city was very often located close to the main Friday Mosque (Jame Mosque). Residential neighbourhoods shaped their own neighbourhood centres while connected to the main bazaar complex via major passageways. The importance of Jame Mosque and royal palace is also visible in the spatial structure of the city.

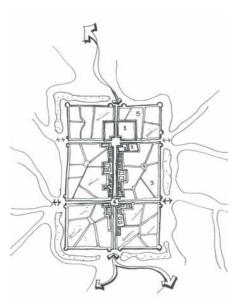


FIGURE 3.5 The schematic structure of an Islamic city. 1: Palace 2. Court, 3. Residential areas 4. Neighbourhood centres 5. Residence of royal family, 6: Main square of bazaar in front of Jame Mosque Drawn by author after (Habibi 1996)

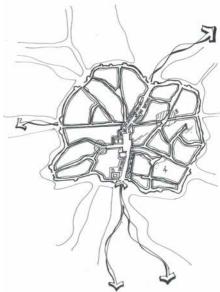


FIGURE 3.6 The schematic structure of a Safavid city (1501–1736). 1: Palace 2. Bazaar, 3. Neighbourhood centres, 4. Residential areas, 5. Jame Mosque Drawn by author after (Habibi 1996)

In the Safavid era, the city was changed to an agricultural, industrial and commercial centre that the government supervised. The most highly esteemed goods were sold

in the centre of the bazaar and adjacent to the mosque, whereas the traditional crafts were located on the outer periphery, along with the caravanserais (Ehlers 1991). The spatial structure of residential neighbourhood follow a more organic shape and neighbourhood centres developed in size and number. While the small shopping passageways of residential neighbourhoods connected the area to the main bazaar, neighbourhood centres had their autonomy and sufficiency for their residents. The bazaar stretched through the city and connected major gates and trade routes together to provide trade caravans with resting and distribution facilities (caravanserai).

After reviewing the spatial structure of Iranian cities and their transformation the importance of the bazaar as the back bone of the city is clear. Some Western scholars such as Pope (1967)³¹ and Planhol (1959) have put a lot of emphasis on the importance of the Friday mosque and its centrality within traditional Iranian cities. However, the Friday mosque can only be considered as one of the main elements of the bazaar due to its large number of visitors and its social-cultural as well as religious activities. Unlike the popular model of Islamic city, it is not the mosque but the bazaar that forms the centre and actual focus of the typical traditional Iranian city. As Falamaki mentions the bazaar is the heart of the traditional Iranian city and without it a settlement is not considered a city (Falamaki 1978).

The importance and growth of the bazaar as well as its decline was interconnected with the expansion and shrinkage of the city. It expanded along the main axes of the city and connected its major gates. The main public activities of the city inhabitants and visitors occurred in or around the bazaar (Kheirabadi 1991). The bazaar contains a large number of structures with architectural and visual importance and suitable locations for hosting different public and social activities which makes it the focus of public life. The additional branches of the bazaar with smaller size and importance developed through the whole city and interrelated residential quarters. These residential quarters (mahallas) surround the bazaar and provide accommodation for different ethnic, religious, and/or professional groups. Even though these neighbourhood centres are connected to the main bazaar by passageways and their small shopping area (bāzārča), they have their local autonomy and provide everyday needs and facilities for their inhabitants. Depending on the size of the neighbourhood and the prosperity of the inhabitants the number of public services in each neighbourhood centre vary, however, even the smallest neighbourhood centre contains a small local mosque and a public bath (Hammam).

Pope for example in his book "A Survey of Persian Art" emphasises that Mosque is the city or rather the focus of the city Pope, A. U. (1967). A Survey of Persian Art. London, Oxford University Press.

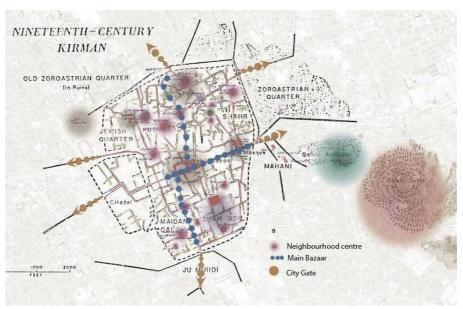


FIGURE 3.7 The structure of the city of Kerman in the 19th century, the importance of the bazaar and its relationship with neighbourhood centres.

§ 3.6 Developing a Framework of Attributes

Going back to the place making theories and its focus on public space, bazaar as the backbone of the city and its relation with surrounding neighbourhoods can be used as an inspiration. This urban element has long been the connective tissue that binds communities and residential neighbourhoods together. However, this link has been fractured during the last century. New redevelopment plans should be designed and implemented in order to regain and reinvent the significance of this lost cohesion and continuity. Therefore it is essential to pay particular attention to tangible and intangible identities that define the bazaar as the heart of the city and support its ongoing evolution. To reach a balance between development programs and conservation of tangible and intangible heritage of Iranian cities, a framework of qualitative attributes according to major characteristics of the bazaar is needed to evaluate new redevelopment plans. The main three pillars of urban design which were explained in the previous section also apply to the bazaar. In addition to the physical quality of the bazaar, what makes the bazaar the main public domain in the city is its role as a source of life and interaction in the city as well as the wide range of activities and functions that it gathers. These three qualities therefore shape the three major criteria of the framework:

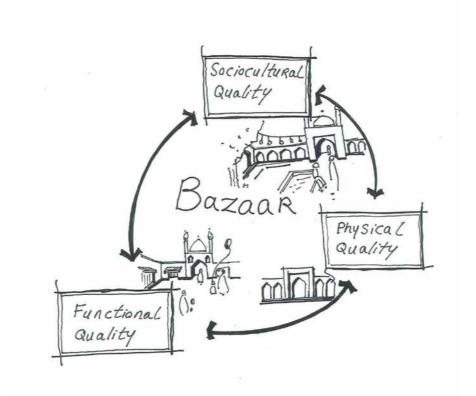


FIGURE 3.8 Three main pillars of urban design can be seen in the bazaar as the main public realm of traditional Iranian cities.

In order to extract influential attributes and qualities from the bazaar as a model of liveable and adaptable public realm an analytical study in these three categories is needed. This part of the study has been done regarding available literature and studies on the main characteristics of the bazaar in Iranian cities and social life of their inhabitants. Due to the limitation of available references, field studies with photographic and sketching evidence have been used to support the statements and significant attributes. In addition, place making theory in international literature as a merging theory from the visual artistic and social usage tradition has been studied in order to support a list of relevant criteria and attributes.

§ 3.6.1 Physical Quality

Urban design in historical Iranian cities used to be a gradual process of growth inside the city's wall which was usually constructed by the rulers. The bazaar as the main economic and social centre of cities acts as a key element in the spatial structure of Iranian cities. Spatial organisation and the main body of an Iranian city cannot be defined without the existence of a bazaar. New developments were historically designed with respect to the scale and visual quality of the bazaar structure and city. The bazaar and its major axes, Rasteh, define main transport routes inside Iranian cities in relationship with major gates and trade routes (Pourjafar, Amini et al. 2014). This quality defines the bazaar as a connective urban element between as well as within localities which is essential for vitality, viability and choice of the residential neighbourhoods surrounding it.

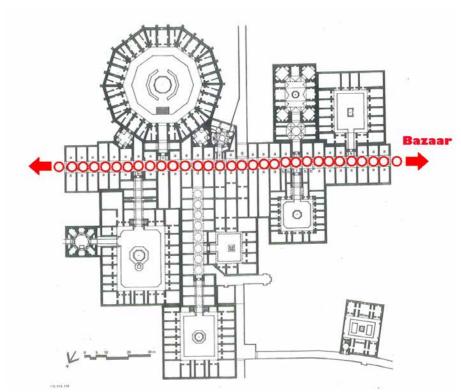


FIGURE 3.9 The bazaar can be seen as a significant connective element in Iranian urban fabrics which relates different activities and places to each other. Source: (Ardalan and Bakhtiar 1973, p 94)

The other important principle is physical arrangement of the bazaar and its relationship with major public buildings such as mosques and shrines. For example the courtyard of Jame' mosque is not only acting as a public space for religious purposes, but also acts as a connecting piece of the accessibility network. It connects different residential neighbourhoods to the bazaar and thus also to other parts of the city. These open spaces act as an urban space full of activities and promote walkability of the area.

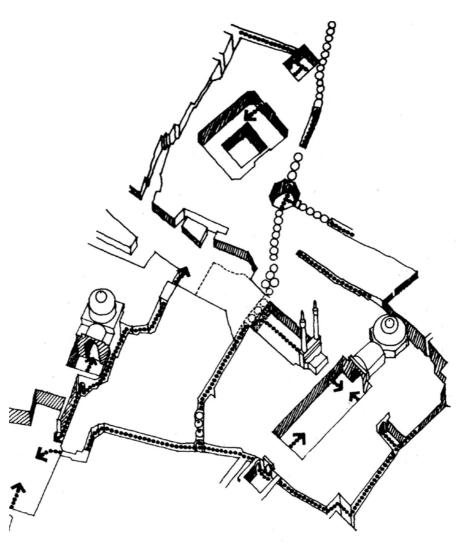


FIGURE 3.10 Spatial integration and accessibility in historical urban core of Yazd. Public realm penetrates through courtyards of major public buildings and improves the accessibility of residential neighbourhoods to the bazaar and to each other. Source: (Tavassoli 1990, p 20)

The bazaar as an un-detachable element of urban cores usually opens to the main square or plaza of the historical city and spread its branches to the neighbourhoods that are arranged around this complex according to their social, economic, and cultural position (Habibi 1996). The spatial design of the bazaar affects the accessibility and control of people within the city. Larger number of available alternative routes and choices results in ease of mobility for residents and visitors. This will led to a more permeable urban space and promotes pedestrian freedom and encourages them to move about in a variety of directions.

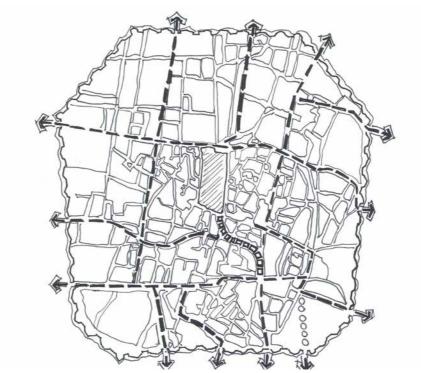


FIGURE 3.11 The structure of the bazaar in Tehran historical core which results in a more permeable urban space and penetrates through residential neighbourhoods.

The permeability of the bazaar is also related to the compact structure of Iranian cities. The physical morphology of traditional Iranian cities is to a great extent a cultural and historical response to the natural environment and climate conditions. However, other necessities such as defence, social cohesion and land conservation for agricultural use can also be considered. Compactness resulted in the proximity of land uses within the traditional city. Land uses are physically integrated while at the same time functionally separated and the principle access network acts as a buffer zone connecting residential areas to the bazaar complex. These components encourage different kinds of people

to walk around at all times of day. Their presence discourages crimes and encourages economic vitality.

Another advantage of compactness in the Iranian climatic situation can be seen in its integrated structure. The compact system of traditional Iranian cities minimised the amount of building surface exposed to the sun, thereby reducing the total heat gained and providing more comfort for its inhabitants. The direction of passageways and major urban buildings were designed according to the direction of favourable winds with the minimum waste of energy and coolness. The bazaar and its networks function as channels for air movement and heat exchange and maintain a significant role in establishing the city's climate (Kheirabadi 1991).

In addition, the height of the buildings (with the exception of some mosques and minarets) is uniform throughout the city. This allows the free movement of air throughout and above the city. In hot and arid Iranian cities, which receive frequent strong winds, the presence of high rise buildings creates serious problems of turbulence. It also promotes the legibility of landmarks and major public places and improves the clarity of the routes, edges, monuments and so forth.



FIGURE 3.12 The skyline of the city of Yazd in the warm and arid climate. Only major public buildings such as Jam'e mosque are built high which promotes the legibility of landmarks and increases the flow of favourable winds.

Even though major parts of bazaars in historical cities have been designed and built by individuals, its spatial continuity and organic consistency can be traced through the whole city from the main square of the city to Friday mosque and finally residential

neighbourhoods (Soltanzadeh 1991). This spatial unity is gained by arrangement of spaces in appealing and useful patterns and rhythmic interrelationships which would psychologically and physically adequate for the needs of city dwellers, decrease sensory overload, stress and fear among them and help them to feel safer.

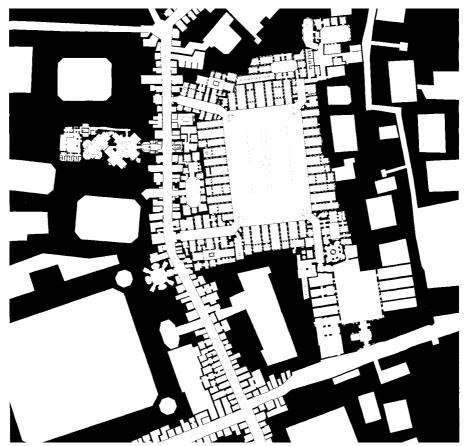


FIGURE 3.13 Isfahan Bazaar and the seventeenth century Caravanserai-e-Golshan. Various open and semi-open spaces with different functions and activities integrate with each other to form the plan of Isfahan Bazaar. Source: (Herdeg 1990)

Even though these compositions have considerable complexity and variety of shapes and functions, order and visual integration is felt and seen in these environments (Tavassoli and Bonyadi 1992). Physical unity and order in Iranian urban cores and especially in the bazaar does not create a rigid and mechanical grid system in the area. In contrast, various shapes and forms are created in public open and semi open areas which help to define their use and activity and transfer feelings and senses to different user groups.

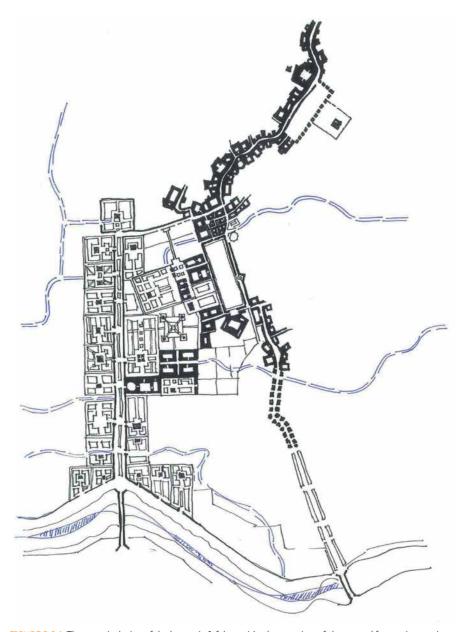


FIGURE 3.14 The organic design of the bazaar in Isfahan with a large variety of shapes and forms give a unique sense of diversity as well as unity to the whole structure of the city.

Walking through a bazaar, you will experience a variety of shapes with different width, height or even decorations which define their status and privacy. Therefore, the bazaar can be described as a unity in diversity: a continues urban form with a collection of urban patterns and shapes. A number of places with different shapes, widths and heights form a chain of connected urban spaces and define different territories. In

order to achieve this unique sense, individual townscape elements and buildings are designed as part of a whole. This have been achieved by allowing diversity (within a visual framework) rather than complete visual conformity and regularity.

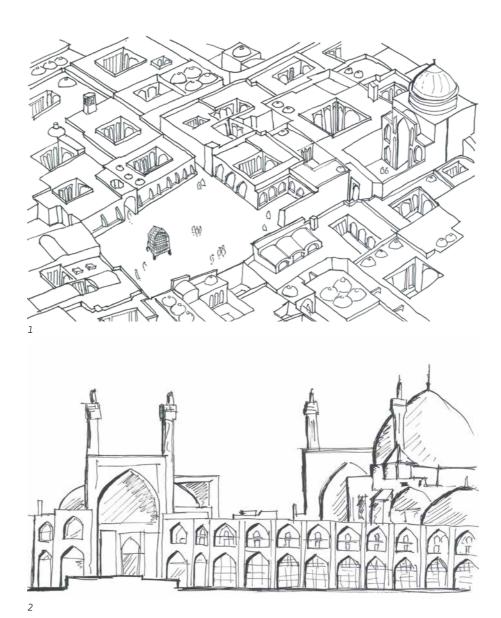


FIGURE 3.15 Up: Creating a sense of closeness and human scale in a square by public and residential units. Down: Composition of the façade in Naghsh-e Jahan square of Isfahan.

Various spaces with different sorts of activities shape around Iranian open public spaces. These urban spaces give a sense of closeness and cosiness to the users by separating themselves visually from the surroundings (Tavassoli 1990). This enclosure has a close relationship with the composition of various urban spaces and continuity of the façades as well as the way buildings across space interlock and interrelate to each other.

Even though Iranian cities are known for their compact structure, composition and relation of buildings with each other specially around open public spaces are of great importance. This can be seen in the main urban square of the city as well as neighbourhood squares.

§ 3.6.2 Socio-Cultural Quality

The bazaar in traditional Iranian cities is not only the spatial backbone and structural core of the system but also has a significant cultural and social role in its economic function (Pourjafar, Amini et al. 2014). Traditionally the bazaar begins at the palace precincts which symbolise the spiritual head of the body and grows in an apparent natural pattern in the direction of its symbolic heart (Great Mosque) going on to the opening of one of the city gates. The bazaar grows as the vital backbone of the city and the pedestrian streets leading into the city's body insert themselves as ribs. Within this structure the vital organs of the city such as bathhouses, schools, caravanserais, bakeries, water cisterns, tea houses and numerous stores of the merchants and craftsmen develop. This form represents the religious, political, financial, and social integration of the traditional city.

The role of the bazaar in social life of the city is also promoted due to its close proximity with the Friday mosque as the main religious and political centre of the city. Mosques took over the religious and cultural duties of pre-Islam fire temples and became the main religious centres of Iranian cities. They are within easy walking distance of the majority of the population and particularly of the merchants. In addition some other religious and cultural buildings shape around bazaar such as religious schools, libraries and shrines. Besides, important political events such as refusing or celebrating an important political decision as well as rituals and religious ceremonies take place in the bazaar (Floor 1990, MasoudiNejad 2005). Ashura ceremony is a very significant example of these social and religious gatherings which is happening every year and includes different social and ethnic groups of the inhabitants and attracts people from all over the city. These social gatherings and religious ceremonies contribute to the vitality of the area and supports the vital functions, the biological requirements and capabilities of human beings.

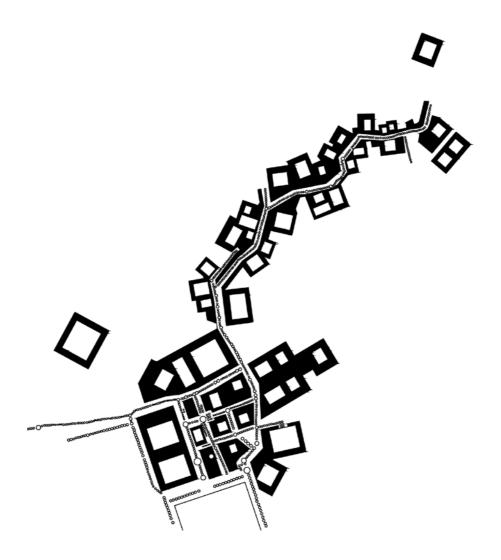


FIGURE 3.16 The schematic plan of Bazaar in Isfahan shows the variety of functions and social life it offers to the whole city. Source: Organicities media lab

In addition to religious buildings, other functions around the bazaar also stimulate social interaction between users and visitors. A good example of these buildings is a public bath house or Hammam. Even though they are designed as a place to wash and clean your body, their facilities and their orientation in the bazaar and residential neighbourhood transform them into a place of social interaction. Inhabitants used to spent almost a whole day relaxing, swimming as well as socialising with each other. Hammams were a place to get the latest news about the neighbourhood or even political events.



FIGURE 3.17 This old photo has been taken in the city of Bam around 1910 during Iranian Constitutional Revolution. Bazaar and its main squares were always a place of social, political and religious gatherings. Source: http://www.negahmedia.ir/media/show_podcast/77153



FIGURE 3.18 Kashan Bazaar. The bazaar in Iranian cities is not only a marketplace but also a place of social interaction and recreation. Photo by Jérémie B. via Wikimedia Commons

Urban sociologists, urban planners and designers generally explain the bazaar as the heart of any Iranian city. The bazaar is usually formed in a linear form and public and

socio-cultural spaces are organised through this linear form. In the West the word "Bazaar" (which comes from the Persian language) has changed its meaning from a place where a variety of articles and activities can be found to a market place. Bazaar is not only the commercial centre of cities but also the centre of social, cultural, political and religious activities. Falamaki describes the Iranian bazaar as the social symbol of a city just like piazza in European cities during the Middle Ages and Hiroba in Japanese cities and shows the degree of their liveability in Iranian cities (Falamaki 1978).

The modest structure of the bazaar and the various range of choices it offers to the residents and visitors makes it a perceivable and comfortable place to walk, shop, chat and so on. Changes in the height and width of bazaar axis and in some cases openings in the ceiling make the bazaar a legible structure. This quality is achieved not only by spatial quality of the space but also by social, cultural and sensual specifications of the area. The mental structure of the bazaar connects with values and concepts of inhabitants and users which provide a unique sense of place.

The bazaar in Iranian cities is a place where spatial patterns are integrated with temporal patterns and the routine activities and behaviour of its residents and users.

Adaptability or flexibility of the bazaar and its social-cultural facilities around it also influence this dimension. When the bazaar was expanded over time, the original linear structure slowly and subtly adjusted itself to the demands of each historical period.

The bazaar consists of a number of smaller bazaars that make up a multi-functional, multi-layered construction. The bazaar and this secondary movement system penetrate to each walled quarter and give access to residential districts. It is a place that connects various resources and services and that reaches large number of persons and activities. The equality of various population groups in accessing the facilities and buildings around the bazaar and the engagement in its social life educates them about moral issues of society. This transforms the bazaar to a truly pluralistic society where the different values and cultures of interest- and place-based groups are acknowledged and negotiated in a just public arena.

At the same time the principal access network connecting residential areas to the bazaar complex acts as a buffer zone between residential (private) and non-residential (public) areas. This leads to higher degree of safety and security inside residential areas because any unknown person can be tracked and recognised by older residents. Moreover, the bazaar also provides a bridge between the middle and lower classes of Iranian society and acts as a meeting place for different ethnic groups as well as the poor and the rich (Mazaheri 2006). In case of climate comfort, the bazaar area is constantly kept in shade by its covered structure and in some cases by its high surrounding walls, acting as a cool channel of pedestrian circulation even in the hottest summers



FIGURE 3.19 Sketch of a typical neighbourhood passageway in Kerman with its semi covered climatic design which also defines the privacy of the neighbourhood.

The span of socio-cultural influence of the bazaar was not limited, as most of the residential neighbourhoods (mahalla) were spatially and socially connected to the grand bazaar through their small neighbourhood bazaar (bāzārča). Neighbourhood centres play an important role in the social and cultural life of a city. Each neighbourhood had its own shopping and service centre in the past, these centres make the district dynamic and lively for its residents. Apart from the role of neighbourhood centre, these neighbourhood passageways have acted as veins which distribute blood to all parts of the body. They carry life and dynamics of the main bazaar as the main commercial and social part and the structural backbone of the city to other districts even the farthest one. This also results in compactness of Iranian cities in regard to the proximity of land use within the traditional city. Land uses are physically integrated and at the same time functionally separated. The land pattern is integrated in such a way that the economic, educational, religious and other public

centres intermingle with residential land. However, the residential neighbourhoods have their own everyday needs with small cultural and social spaces which help their local autonomy.

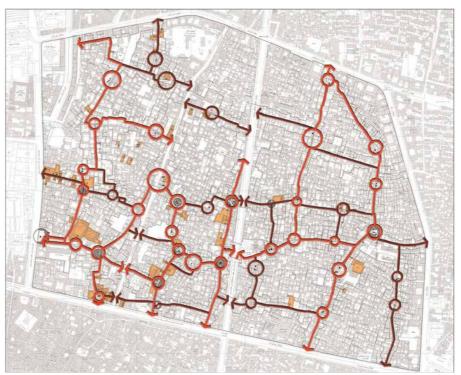


FIGURE 3.20 The network of neighbourhood centres and their relation with each other in Tehran

The other quality in the socio-cultural domain of traditional Iranian cities is the use of shape and form of open spaces to transfer sense of place and define the access and linkage. Even though most of the major passageways lead to the grand bazaar with extreme richness and access to opportunities, the change in width, height and shape of passageways and entrance portals or even their decoration define their use and target groups. These variations add to the visual attraction of the place as well as hierarchy and territory structure in cities. Hierarchy and territory is a very significant principle in residential areas. In addition to private and public territory, neighbourhood centres were leading to a semi-private open space, which belonged to a few number of households, through secondary passageways. The highest rate of social interaction among neighbours especially housewives took place in this space and residents had a sense of belonging and attachment towards it. These activities and interactions result in creating sense of place and increasing place attachment of the residents.

§ 3.6.3 Functional Quality

As mentioned before, the definition of the bazaar changed in the West from a place of variety of functions and activities to a market place. Traditionally, the bazaar complex in Iranian context consists of a large variety of buildings along the axis generally referred to as bazaar or when smaller as Bāzārča. Furthermore there are the Sarāys or caravanserais, and their smaller version, so-called Timčas. All these buildings are interconnected with covered market streets (Rasteh) and passageways (Dālān). These streets and lanes are not only market streets, but also communication routes for people and goods to enter and exit the bazaar. Goods, previously brought by caravans of loaded camels, donkeys and mules, now arrive by lorries, and after storage are carried on the back of porters to the various workshops and sales points (Bakhtiar 1974).

Life in the bazaar is not always about business. Although the bazaar complex is the commercial heart of city, there are buildings that serve a function other than a commercial one (MasoudiNejad 2005).. Today, there are still some Madrasa's in the bazaar where religious youths as well as older males receive advanced religious instruction which may lead to a religious career or to serve one's own edification. One also could find some refuge from the hustle and bustle of the bazaar inside Madrasa's courtyard which is often lined with trees and has a large pond in the middle.



FIGURE 3.21 Hammam-e Vakil in Shiraz is a good example of typical traditional Iranian bathhouses

Kheirabadi divides the activities within the bazaar into two major groups of economic and non-economic spaces. Economic activities includes shops and trade offices, storage spaces, warehouses and workshops while non-economic activities consist of religious, socio political, recreational and educational spaces (Kheirabadi 1991). Considering the relation between bazaar and residential neighbourhoods and the whole city, the major functions can be categorised as figure 3.22.

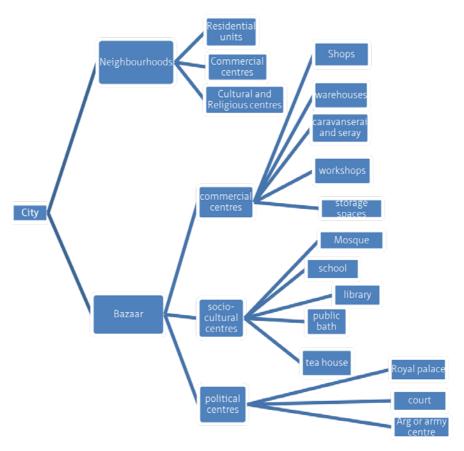


FIGURE 3.22 The main functional categories of spaces in traditional Iranian city.

There are a number of mosques, characterised by different design and size, where the population of the bazaar undertake their daily praying and participate in religious ceremonies. Some of these mosques had a special relation with one particular guild that either was its patron and/or had (co)financed its construction. Another significant religious function is Takiya where communal religious ceremonies and mourning's are

held, and where during Moharram and Safar the Shi'ite Passion play (Ta'zia-khāni) was performed.

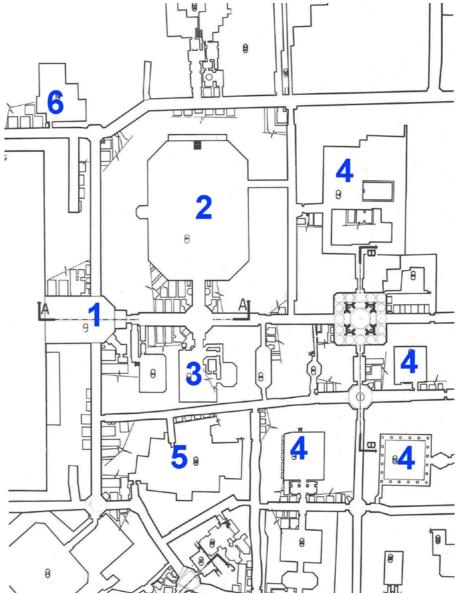


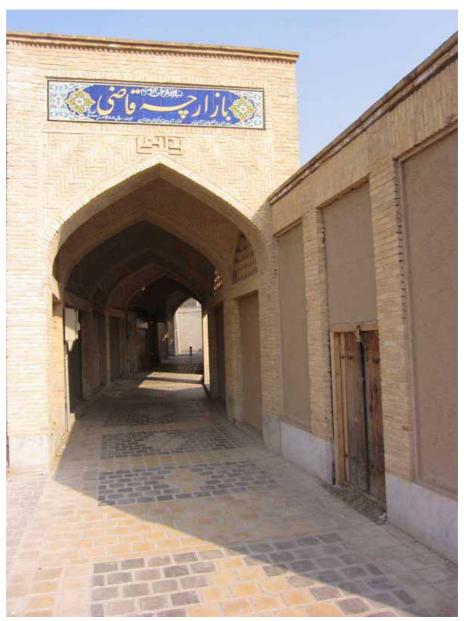
FIGURE 3.23 Mix of land use and activities in a small section of Isfahan Bazaar. 1:bazaar entrance, 2: Sarai-e Shah, 3: mint, 4: Sarai for various occupations such as wool dyer, stonemason, goldsmith, 5:Public bath and 6: Shoe bazaar. Source: Ali Bakhtiar, The Royal Bazaar of Isfahan, Iranian studies, 7/1-2, 1974, p.336

In case of public facilities, there are a number of functions available in the bazaar complex. Public bathhouses (Hammām) were constructed in the bazaars, where men and women congregate for relaxation. In addition, there were also all kinds of itinerant and shop-based sellers in the Bazaar where a large variety of foods and drinks made up the supplies for social gatherings. There also were itinerant sellers of coffee, tea, water, and smokes as well as coffee-houses (qahvakhāna) where the same services were offered. Moreover, these were popular gathering points to exchange news, gossip, and to listen to poetry and story tellers. Some governmental activities such as zarrāb-khāna (the mint) are also located in the bazaar. Here coins were struck by hand providing the means of exchange for facilitating commercial transactions (Floor 2007).

As Bonine declares "Iranian bazaar is a unified, self-contained building complex of shops, passageway, and caravanserais, interspersed with square (Meidan), religious buildings, bathhouses (Hammam), and other public institution" (Bonine 1990, p 21). This variety of activities shapes the place identity of the bazaar and reproduces the vitality and liveability of cities, both in case of economic development and social interaction. Bazaar as the main centre of public life contains the main public activities of the inhabitants and visitors. The high density of activities and mix of uses in the bazaar encourage different kind of people to walk around at all time of the day and its high density and mix of uses give mutual support to each other as well as the vitality of adjacent neighbourhoods.

n addition, the grand bazaar links the rural areas with local and regional urban consumer markets and integrates the provincial cities into modern industrial sectors (Rotblat 1975). In a traditional city in Iran, the bazaar has been a place for the economic, social, political, cultural, and civic activities of people (Moosavi 2005). They organise the social activities, public buildings and spaces through their structures and with help of the collection of their activities and mix of land use, offer a large span of opportunities to the inhabitants and tourists.

However, the bazaar is not the only activity hub of the city. In traditional Iranian urbanism, each neighbourhood (Mahalla) had a small independent neighbourhood centre which consist of a small mosque, public bath, a square and a few number of shops which provide daily needs of the residents. Depending on the cultural and climatic characteristics of the city some other facilities were also provided in each neighbourhood such as cistern (water reservoir) and other religious spaces. Local squares were mainly places in front of neighbourhood mosques that act as a gathering place for adults to discuss important matters and hear about the news and for kids to play in a safe neighbourhood-scale open space. These open spaces are used on different occasions by different groups and activities and were adaptable to public need and climatic condition of the cities. Most of the activities happen within walking distance of residential quarters which lead to walkability and vitality of the neighbourhood.



 $\label{thm:continuous} \textbf{FIGURE 3.24} \ \ Shahshahan \ neighbourhood \ centre\ in\ Isfahan \ with\ its\ short\ line\ of\ shops,\ mosque,\ public \ bathhouse\ and\ small\ neighbourhood\ square.$

Source: http://www.maskansazancz.ir/Default.aspx?tabid=206

§ 3.6.4 Proposed framework

Placemaking theories focus on improving public space as the heart of an urban environment. In the previous section major characteristics of the bazaar as the main public space in Iranian context and its relationship with surrounding residential neighbourhoods have been investigated and categorised in three main criteria. These attributes and qualities have been identified for the intended quality measurement framework of this research

Even though these qualities have been extracted from deep study of traditional Iranian urban fabric, in most cases they are supported by international literature on urban performance quality which is very interesting.

In the physical quality criteria, the most important quality attribute is the connective role of the bazaar as a transition between and within localities which promote vitality and viability of public space. This parameter can also be seen in international literature such as in book of Barton et al "shaping neighbourhoods" (Barton, Grant et al. 2010). Spatial arrangement of the bazaar in relation with other major public buildings such as mosques extend the public realm to the courtyards and open areas of these public spaces and improve accessibility and walkability of the area. This also increases the number of available alternative routes which promotes pedestrian freedom and control. Within international literature, Francis Tibbalds name this quality permeability (Tibbalds 1992) and Bentley et al the authors of the book "responsive environments" define it as the degree the spatial design of the space affects the accessibility and control of people within a city district (Bentley, Alcock et al. 1985).

The other spatial quality of Iranian urban fabric is its compactness and proximity of land uses which is a spatial response to its cultural and climatic condition. Climate related typologies in access network, considering height limitation except for a limited number of landmarks as well as defined vistas and overlooks to and from historical monuments are among other attributes in this criteria that promote legibility of the urban district. Lynch defines this quality as the capability of being perceived by the senses (Lynch 1981, p 142) while Bentley et al measure it as the degree people understand their way through it (Bentley, Alcock et al. 1985).

The next significant characteristic in this criteria is the continuity and organic consistency of urban fabric. It offers appealing and useful patterns with variety of shapes and functions which offers complexity as well as order and visual integration. This quality can be defined as unity in diversity and can be found in international literature as well such as Sitte (Sitte 1965) and Cullen (Cullen 1961).

Composition and order of urban elements plays a significant role in defining urban areas. Interrelation of urban grains around public realm, enclosure of public space, proportion of new developments and its relevance to historical context and the gradual transition between public and private domain in residential neighbourhoods define other attributes in this criterion.

The next criterion, socio-cultural quality, focuses on the liveability and vitality of Iranian historical context and its social life. Proximity of major urban elements to the bazaar as the main public realm of Iranian cities and variety of social and ethnic groups of people accessing these areas transform bazaar to a place of major social and political gatherings as well as religious events and shape the social and cultural hub of the city. Vitality and liveability are also mentioned as performance qualities in international literature, for example Lynch defines vitality as "the degree to which the form of the settlement supports the vital functions, the biological requirements and capabilities of human beings" (Lynch 1981, p 118).

The courtyards of major public monuments extend the public domain of the bazaar as the main spatial backbone of the city and connect residential neighbourhoods to each other and promote the social life of the residents. The mental structure of the bazaar connects with the values and customs of inhabitants and users which find it a perceivable and comfortable place to walk, work and live that promotes their sense of belonging. In their paper "Towards an Urban Design Manifesto", Jacobs and Appleyard name this quality as "authenticity and meaning": an authentic city is one where the origins of things and places are clear and It is easily possible for users to perceive the general layout of an urban space, its public functions and the opportunities it offers (Jacobs and Appleyard 1987, p 116).

Adaptability and flexibility of the bazaar and its related public spaces define a multifunctional and multi layered construction which expands and shapes over time and adopts itself to the needs of users and inhabitants. Among international scholars Jane Jacobs celebrates the organic and unplanned city in her book "The Death and Life of Great American Cities". She argues that unplanned physical environment fosters an urbane and safe community and mentions "structures built over time" as a major criterion in urban quality in her book (Jacobs 1961).

Equality of various groups in accessing and using the facilities and services in the bazaar and engaging in its social life transform the bazaar to a bridge between the middle and lower classes of Iranian society and is considered as one of the most significant socio-cultural systems in Iranian cities (Mazaheri 2006). At the same time its acts as a buffer zone between residential (private) areas and non-residential (public) areas which promotes safety and security of the neighbourhoods. Comfort and safety of the inhabitants were also granted by climatically designed passageways and defining transition between different territories

The other important attribute in this criterion is the local autonomy of residential neighbourhoods despite their close relation with the bazaar as the main public realm of the city. It increases the participation of residents in social and economic life of the neighbourhood and promotes the walkability of the area.

In the last criterion, functional quality, the bazaar and its related public spaces are shown as the centre of diverse activities in the historical context. It shapes the social, political and cultural backbone of urban fabric with different functions and social interactions between various users. Even though Jane Jacobs work is focused on American downtowns, her idea about mix of land use and activities (Jacobs 1961)can also be found in Iranian traditional context. The use of shape and form of public spaces to define their use and activity is a significant parameter in this domain. Variety of shapes and functions adds to the visual attraction of the place and results in creating sense of place and increasing place attachment of the residents. Density of public space and equality of opportunities for all social and ethnic groups as well as residents and visitors are also among important attributes in this category.

Self-sufficiency of residential neighbourhoods and the clever distinction between public and private territories are also among major quality attributes which promote the opportunity for social interaction between residents and preserve their sense of belonging to community. Barton et al also mention increasing in local autonomy as an attribute in their book "shaping neighbourhoods" (Barton, Grant et al. 2010).

URBAN QUALITY CRI- TERIA	PHYSICAL QUALITY	SOCIO-CULTURAL QUALITY	FUNCTIONAL QUALITY
Main Quality Parameters	a) Enclosure of public space b) Diversity of vistas and overlooks c) Integration of old and new developments d) Visual integration and composition of facades e) Legibility of historic landmarks f) Connectivity within and between localities g) Quality of public space h) Unity in variety	a) Hierarchy between public and private b) Social engagement of residents c) Walkability and pedestrian convenience d) Cultural Significance e) Human scale f) Accessibility g) Perceivable basic layout h) Sense of belonging i) Equality of various groups in accessing opportunities	a) Mixed land use b) Balance of residential and public territories c) Local autonomy of the neighbourhoods d) Integrating heritage into design e) Density of public space f) Multi-functional and multi layered g) Equality between tourists and residents needs h) Opportunity for Social interaction i) Various alternative choices

TABLE 3.1 The main three key criteria and their modified quality parameters for Iranian historical urban cores

To conclude, these three urban quality criteria in Iranian heritage context shape the main framework of urban quality in this research which will be used to evaluate the

urban interventions in Iranian historical context. Their main quality parameters will form a guideline to analyse and evaluate the performance of urban design projects in this research and will be tested in the next chapter. These quality attributes have been extracted from traditional Iranian urban fabrics, however some of them have been also identified by international literature for other contexts.

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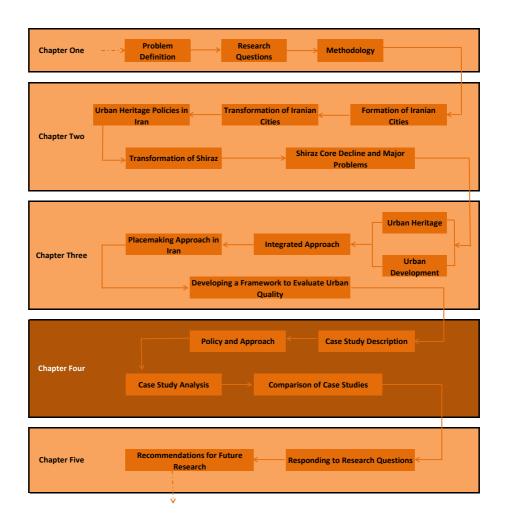
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4 Cases



§ 4.1 Introduction

The structure of the historic city core of Shiraz has developed along the main access network of the city from west to east and its bazaar has been stretched towards the north parallel to the royal complex. Residential neighbourhoods surround the bazaar and its significant religious buildings and are connected to the main public realm of the city by neighbourhood passageways.

However, the building of new streets to give access to cars and new technologies made the old neighbourhood edges and structure less tangible. Each urban block is now composed of parts of some remaining old neighbourhoods which are being surrounded by newly built streets. Even though their connection to the main bazaar and other parts of the old city has been disrupted in the current situation, they house a number of significant monuments and neighbourhood structures.



FIGURE 4.1 The current situation of the historical core of Shiraz showing the bazaar structure in red, religious and cultural spaces in green and valuable and other historical buildings in orange.

To examine and evaluate urban design experiences in the historical city centre two case studies in adjacent quarters in the historical core of Shiraz with similar area and heritage significance are described and analysed in this chapter. These two case studies have different approaches in execution and financing of the project.

Since 1997 a new system of city centre management was defined to engage different institutions alongside local authorities in order to solve the issues and difficulties of these districts. A series of evolutions in the urban management system (as discussed in chapter two) changed the city centre planning and management policy and resulted in closer collaboration between involved agencies. The new policy emphasised on local empowerment and decentralising of the decision making process. The urban rehabilitation and regeneration plan of Sang-e Siah district was one of the first outcomes of this new trend and represented a new approach towards city centre designs in the city core of Shiraz. Sang-e Siah project represents a distinctive model of city centre regeneration due to its local initiation and participation in all phases from decision making, planning, financing, technical survey to the process of design and implementation. The second case study is also one of the most significant old neighbourhoods in Shiraz. Its main fame is due to the Shah Cheragh shrine which is the second most visited shrine in Iran after the shrine in Mashhad. This case study (Shah-e Cheragh project) has a top down approach and was executed through a large-scale intervention by religious powers' financial support. This chapter describes the urban interventions in these two quarters and analyses and evaluates their approach, design and implementation process.

§ 4.2 Sang-e Siah Case Study

Sang-e Siah project has been selected as a case study in this research because of its distinctive approach and strategy in dealing with the problems and issues of historical environments. Although this project cannot represent an ideal model of city centre rehabilitation, it can be viewed as a different approach which moved beyond the previous interventions (Izadi 2008). Most of the information in this chapter was collected through interviews with key actors involved in this project and analysing the pictures, plans and graphs presented in the project reports as well as published papers and studies on the district

§ 4.2.1 Background of Sang-e Siah Quarter

The project area is located at the southwest side of the historical city core of Shiraz. This urban block includes the historical quarters of Darb-e Masjed, Armenian Sar-e Bagh; the main parts of Shah Square, Sar Dezak, and the Jewish quarters . The spatial structure of these quarters did not remain intact, however the names of these neighbourhoods are still used by the inhabitants.

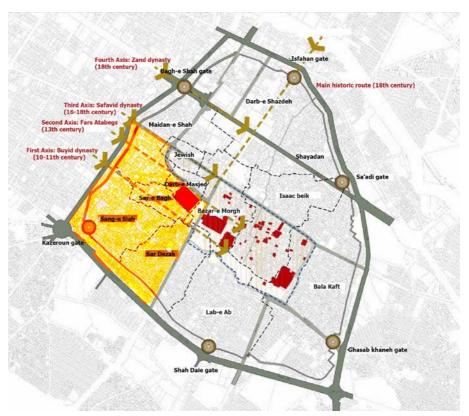


FIGURE 4.2 The boundary of the Sang-e Siah block defined by newly built streets on the north and east and the ring road around the historical city core. Source: (Afsar 1986)

The urban block containing our project location is approximately seven hectares and has been separated from adjacent quarters by the imposed avenues of the 1920s and 1930s (Figure 4.1). The boundary of this urban block is defined by the Dastgheib Street and Lotfalikhan Zand Street to the north, Sibuyeh Boulevard to the south, Qaani Street to the west and Hazrati Street to the east (Izadi 2008). These new imposed streets

as well as the ring road at the edge of the historical core on the west and south side connect this quarter to the Shiraz road network.

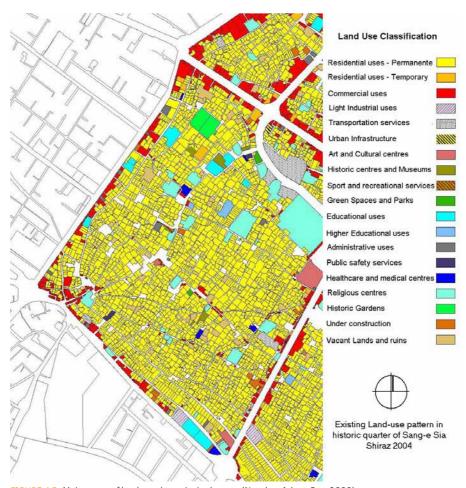


FIGURE 4.3 Major types of land use that exist in the area (Naqsh-e-Jahan-Pars 1998)

Although there are some commercial and religious buildings in the area, the dominant land use of the area is residential buildings. In addition to new commercial and service uses which are located along the new streets at the edge of the area, there are four small local bazaar (Bazarcheh) in this urban block which mainly provide everyday needs of the residents. In general religious buildings, especially mosques and shrines, are the most significant features of the urban landscape and dominate the skyline of the historical core of Shiraz (Clarke 1963). More than 26 Religious centres (in green) including mosques, local shrines and theological schools are located in this district.

Figure 4.4 illustrates the ratio of land uses that currently exist in this area. This block contains over 2476 residential units with 15435 inhabitants which is approximately 18.7% of the historical core area (Naqsh-e-Jahan-Pars 1998, Pardaraz 2003). Residential units including single or multi-family homes and newly bulit apartments occupy 62% of the area and as said before is the dominant land-use in the urban block. The second major land used in the area is the access network with 19%. Commercial and religious activities with 4% are in the next rank while almost 3% of the area contains vacant lands and ruins.

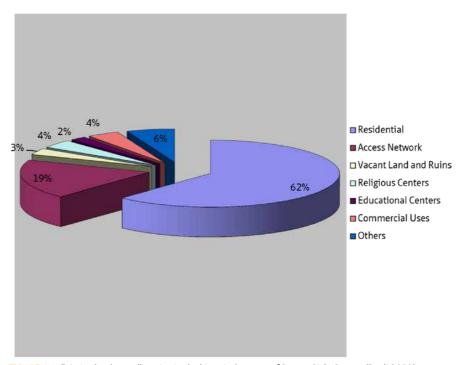


FIGURE 4.4 Existing land-use allocation in the historical quarter of Sang-e Siah, Source: (Izadi 2008)

In general, the traditional structure and historical monuments of the area have been preserved despite of unintegrated recent constructions and interventions. More than fourteen monuments of the area have been registered by the Cultural Heritage Organisation in addition to more than hundred unlisted architecturally valuable buildings which are mainly residential units.

§ 4.2.2 The Area of Intervention in Sang-e Siah Project

The rehabilitation of Sang-e Siah district focuses on the main pedestrian route in the area, a north-south passageway that runs along the heart of this urban block and ties major historical buildings and monuments of the area. This route starts with Bibi Dokhtaran Tomb and continues to the Taj-al Din Gharib mausoleum which is located in close proximity with the old Kazeroun Gate. These major historical buildings and monuments are located near each other and form five distinctive clusters along the Sang-e Siah axis. This quality defines this axis as a heritage corridor which gives a vital and distinctive quality to the area and plays an important role in providing continuity within the urban block. Next to each of these clusters a small neighbourhood square or public space was shaped which usually consists of a short row of shops and service areas which provide daily needs, a religious centre and in some cases a small open space.

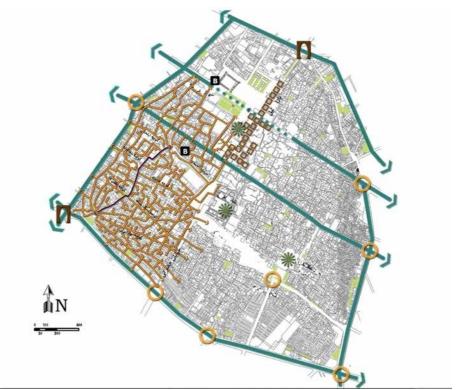


FIGURE 4.5 The monuments clustering along the Sang-e Siah axis give a significant role to this pedestrian route. Revitalisation of this route can result in integrity and continuity of this quarter..

Sang-e Siah axis as a collection of these monuments and neighbourhood squares creates the main public space within this urban block. In addition, with its several distinctive monuments such as the mausoleum of Bibi-Dokhtaran and Sibuyeh, Mirza-Hadi and Siavoshan Mosque, Armenian Church and the shrine of Taj-od-Din Qarib, Sang-e Siah axis is one of the most significant tourist attractions of the historical core of Shiraz. A good example is the Moshir complex (a mosque, a local bazaar, bath, theological school, cistern, and a neighbourhood unit) which is frequently visited by both residents and tourists.

Besides the mentioned public monuments, this urban block contains numerous valuable houses. However, due to radical destruction and interventions in the area, some of the finest traditional houses were ruined and many others are deserted and partly ruined. The Cultural Heritage Organisation has tried to identify and list these historical houses during the last decade. Forough-al Molk House, situated in the proximity of the Bibi Dokhtaran cluster, represented an impressive instance of these houses.

§ 4.2.3 Strengths and Weaknesses of Sang-e Siah Quarter

In comparison to other districts of the historical core of Shiraz which have experienced radical street construction and destructive large scale redevelopment plans during the last thirty years, this area was relatively secure from these interventions. However, social, economic and spatial problems resulted in deterioration and negligence of this historical quarter. Pardaraz Consultant Office who was responsible for the revision of the city centre comprehensive plan listed the major problems in this area as below (Pardaraz 2004):

Low physical quality of the area: Lack of maintenance and proper restoration has accelerated the physical decay and deterioration of old buildings and historical structures. Despite the efforts of the Cultural Heritage Organisation, these significant monuments remain isolated from their context and have lost their symbolic meanings due to lack of available funds for restoration and maintenance.

Besides, the drastic changes in the social and economic status of the residents as well as the change in their life style demand new requirements for the use of historical buildings. Large one or two story courtyard houses have been divided into smaller units to maximise rental profit and provide cheap accommodation for workers and immigrants. At the same time some of these traditional houses were demolished for the construction of apartments and row houses. Most of the replaced buildings do not

provide the formal and functional qualities of the old ones and disrupted the spatial integrity of traditional patterns (Izadi 2008).



FIGURE 4.6 Lack of maintenance, abandonment of the historical buildings and in some cases using monuments as storage areas resulted in bad image and low spatial structure of the area.

Transformation of social characteristics: Most wealthy families moved out of their old district and live in the more modern parts of the city because of the facilities they offer such as parking spaces, higher security, better quality access and sufficient public and recreational space. As mentioned in the previous paragraph, big merchant houses have been divided into small rooms and rented to lower income families, rural and Afghan migrants who are seeking a cheap place to live in. This demographic change resulted in different demands and interests and eventually social fragmentation and cultural cohesion. Besides, these new users do not get involved in civic responsibilities and neighbourhood activities due to their financial and cultural status showing the lack of sense of belonging within the residents.

Poor accessibility and connectivity: In most of the interviews with the residents of the area, automobile access and lack of parking were mentioned as key issues. Although accessibility into the neighbourhood is also a priority for residents, the privacy of residential units and pedestrian routes, human scale and interaction between buildings and enclosed open space should also be considered. It is critical to reach a balance between the advantages of better vehicular accessibility and physical and social integration of the district.

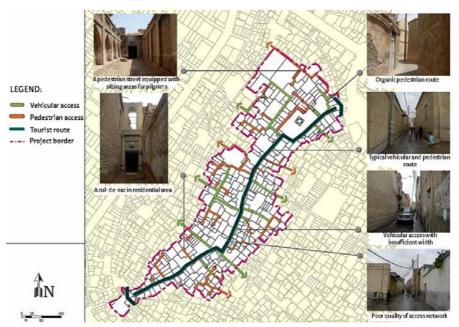


FIGURE 4.7 According to the interviews limited automobile access and lack of parking spaces are key issues of this area. In the above map, vehicular and pedestrian routes are illustrated in two colours.

Lack of security: Lack of security and high levels of crime are a common major problem in most parts of historical urban cores due to large number of abandoned and empty houses and monuments, which create a perfect shelter for crime and drug related activities. In this urban block as well, the fear of crime and unsafe pathways are among the main problems of residents. The lack of street lights and the presence of working-class migrants have mentioned in almost all inhabitants' complaints about the security issues.

Insufficient services and infrastructures: This area is dealing with severe lack of public infrastructures and services. The lack of a sewage collecting system, absence of proper green spaces and a large number of deserted ruins and vacant lands have been the main environmental problems of the area from the residents' point of view. Insufficient open and recreation areas as well as cultural activities in the area (less than 1 percent of the total area) were also mentioned in most of the complaints. The existing public infrastructures and open spaces are also experiencing physical decay and deterioration due to lack of planning and maintenance investments.

In spite of the mentioned problems of the area and the severe poverty of its residents, Sang-e Siah quarter has some potentials and strengths that can be used as assets in rehabilitation plan of the area. The most significant ones are as follows:

Traditional structure: In this area different land uses, such as housing, local squares, mosques and places of social gatherings are highly integrated and the main pedestrian route links five major clusters of significant monuments of the area and creates a vibrant urban environment. Even though most of the historical monuments of the area need maintenance and restoration, fortunately this part of the historical city core of Shiraz has not been invaded by radical imposed streets and the traditional layout of the neighbourhood is still intact.

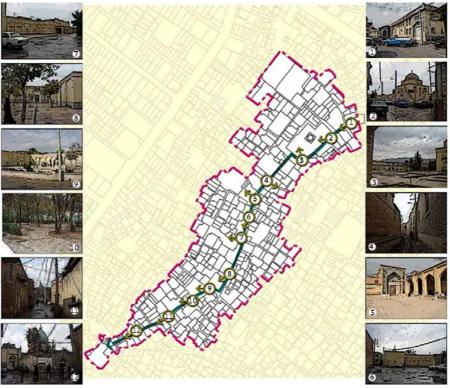


FIGURE 4.8 The monuments clustering along the Sang-e Siah axis define a heritage corridor which plays a vital role in this area and provide a variety of sights and views for visitors.

The vitality of religious festivals and rituals: According to a survey carried out by Pardaraz Company more than 26 active religious centres with the area of 26000 square meters (3.73 percent of the whole area) are located in this area which shows the importance of religious activities and pilgrimage in this district. Even though the area is dealing with social segregation and physical decay, the religious activities are acting as a cultural source of inspiration for citizens (Izadi 2008). In addition, religious festivals and collective ritual activities in the local shrine, mosques, and Hosseiniyahs attract many of the former residents to participate. Men are more associated with the

mosques and formal ritual gatherings while women are more active in local pilgrimage (Betteridge 1985). Such collective ritual activities express a deep sense of place and attachment as well as vitality within the quarter.

The outstanding collection of monuments: This area contains numerous valuable monuments including eighteen and nineteen century residential houses and significant religious and cultural centres, which are major tourist destinations in the historical core.

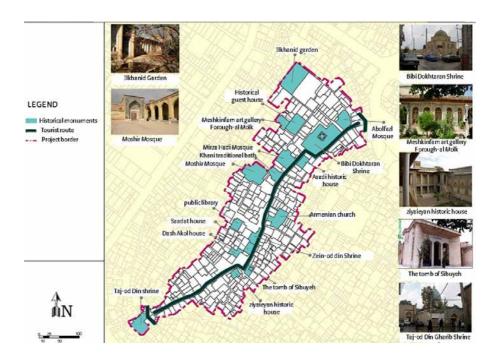


FIGURE 4.9 Historical and religious monuments located in this area act as a driving force for rehabilitation of the area.

In addition to the mentioned points, interviews with residents of the area show that they prefer to stay in their property in spite of social and physical problems they suffer from. This sense of place attachment can acts as a potential in the rehabilitation process of the area. Upgrading occupied buildings and creating the conditions for people to continue living in their homes not only reduces the threat of abandonment and physical deterioration of the historical fabric, but also prevents the consequent social and economic problems and expenses during the implementation of the project (Izadi 2001).

§ 4.2.4 Policy and Approach of Sang-e Siah Project

In this section the urban design intervention in Sang-e Siah quarter is investigated through the process of its policy, planning, decision making and financing. As mentioned previously, Sang-e Siah quarter is one of the most valuable parts of the historical core due to its numerous monuments and historical houses, mosques and shrines. Unfortunately most of these significant buildings suffer from neglect and lack of maintenance which result in physical deterioration and decay. In 1999 the local representatives of the Urban Development and Revitalisation Company (UDRC) proposed a regeneration program for Sang-e Siah quarter in order to halt its dramatic physical deterioration and improve its social and economic situation.

The project required a wide range of cooperation between various engaged agencies in combination with local authorities and residents to solve the social, economic, physical and administrative issues of the area.

The Council for Historical District approved the proposal to share the responsibilities of the project and provided a partnership-based policy between these different agencies. At the earliest stage of the project, the Council for Historical District nominated this area as a significant cultural and tourist destination. The Sang-e Siah axis was announced as a new pole of attraction in the comprehensive plan for the development of the tourism industry in Shiraz. As a result, the project was partially granted by a fund for development of tourism.

As each agency had its own interests, any intervention in the historical core needed a negotiation strategy to address these demands and priorities. Between the partners there was a great tendency towards a development oriented scheme in order to sustain the rehabilitation of the district. On the other hand, there was a strong opposition to the redevelopment schemes especially from the local Cultural Heritage Organisation side due to the redevelopment schemes' reputation of destroying historical and architectural values during the past decade. In addition, the area has experienced a period of radical preservation and restricting regulations during the last decades and has suffered economically and socially from these policies. Therefore reaching a balanced approach was essential for the rehabilitation of this area resulting in a change in the building regulations process in the area. The new regulation obliged the owners of property within the area who want to construct, repair, demolish or renew a building to get building permission from the Council for Historical District and its technical commission via the municipality system.

A guidance note or manifesto was prepared by this Council which addressed the significance of this historical area and its elements and which shows the rapid loss of the historical monuments and structures (Izadi 2008). It also mentioned that careful

replacement of vacant lands with new constructions and small scale development of ruined buildings should be done to enrich the importance of the historical monuments (CHD 1999). The Council for Historical District introduced a sensitive policy and a new integrated approach towards intervention in the area to achieve both conservation and development goals. This strategic policy considered more than mere restoration of the monuments and physical interventions; it also defined major duties and responsibilities of the involved agencies. For example, Fars Urban Development and Revitalisation Company together with the Cultural Heritage Organisation were engaged in restoration of a number of key monuments and re-development of public facilities in the area while the municipality of Shiraz was involved in upgrading public spaces and parks in cooperation with agencies in charge of gas, electricity, drainage and drinking water in order to upgrade infrastructures.

At the first stage of the program, the main emphasis was on restoration of individual historical buildings and public open spaces. Improving open public spaces also played an important role in connecting monuments, houses and public services and providing an apt place to express cultural and social activities and strengthen sense of civic identity and pride (Izadi 2008). However, the critical situation of the area needed other types of interventions such as adaptive re-use, careful renewal and in some cases replacing elements which were no longer viable or needed by the new functions. Adaptive re-use of historical buildings was based on a new policy named "New Life Old Structures" This trend is considered as a tool to assure the maintenance of restored historical buildings and has already become a part of the city centre rehabilitation programs in Iran.

At the same time, the new policy introduced a gradual process of physical interventions and economic improvement. In the residential units this gradual rehabilitation was created by facilitating the necessary living condition by improving infrastructures and developing required functions and facilities. It was combined with motivating the inhabitants to continue living in the area and getting them involved in the program.

In order to encourage local owners and residents to participate in the physical interventions, sharing or owning the property was considered to generate income for future restoration and maintenance (UDRO 2001). It resulted in attracting investors

In 2001 the Master Jury of Aga Khan Award for Architecture nominated and awarded two projects in Iran: Bagh-e Ferdowsi and "New Life for Old Structures" project. "New Life for Old Structures" was praised for its new approach in using the historical built structures for new public usage according to contemporary urban requirements. The program was a collaboration between Iran Cultural Heritage Organisation and the Urban Development and Revitalisation Corporation. After restoring and adaptively reusing non-monumental structures in historical cities, they were legally transfered to the private or public sector for cultural, educational or tourist usage. Derakhshani, F. (2002). Iran and the Aga Khan Award for Architecture. Iran, Architecture for Changing Societies, Yazd and Tehran, Iran, Umberto Allemandi & C.

and promoting sustainable regeneration of the neighbourhood. Furthermore, the restorations and physical interventions have provided employment and training of craftsmen in various types of traditional construction skills (Leslie 2001).

§ 4.2.5 Design Description of Sang-e Siah Project

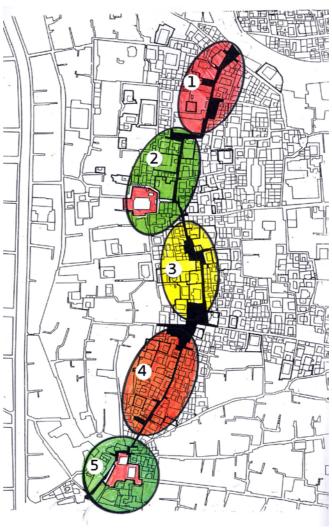


FIGURE 4.10 Five prioritised clusters identified by the strategic plan within Sang-e Siah quarter. Source: (Fahimizadeh 2001)

The main objectives of this intervention were to improve quality of life for residents and enrich the historical image of the area to attract visitors. Therefore, the framework plan introduced strategic proposals to promote gradual rehabilitation of the existing residential units. It emphasised on improving the structure and infrastructure of the area without any strict planning restriction for the inhabitants while avoiding large scale redevelopment in the area. In the other words, it introduced a dynamic and flexible strategy which has a process-oriented approach towards the project and which is adaptive during its implementation.

In the design process of the project, five major zones were prioritised for a range of interventions such as rehabilitation, conservation and upgrading. In addition, thirteen participatory conservation projects throughout the area were proposed which required an integrated collaboration between relevant organisations and institutes.

Zone 1: The first phase of the plan consists of the Bibi Dokhtaran cluster including seven distinctive areas of priority intervention which started in the summer of 2001 and completed in 2003. This cluster is located on the northern side of the urban block, at the beginning of the Sang-e Siah passageway, and houses a significant collection of historical monuments. The most important ones which were identified by the strategic plan were the 17th century Bibi Dokhtaran shrine with adjacent Haj Mahya and Forough–al Molk historical houses, Abbasieh religious centre and Abolfazl Mosque (Figure 4.10). A number of vacant lands and properties within this cluster were also considered for new development projects.

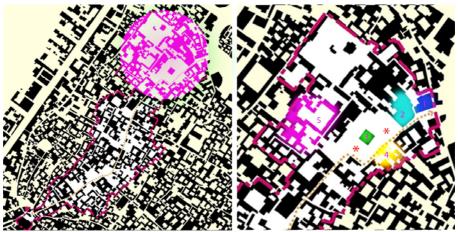


FIGURE 4.11 The first phase of Sang-e Siah project: 1. Abbasieh, 2. Abolfazl Mosque, 3. Bibi Dokhtaran shrine, 4. Vacant land in front of Bibi Dokhtaran shrine and 5. Historical houses of Forough-al Molk and Haj Mahya. Stars indicate the schools built up on the shrine's plot..

A restoration plan for the Bibi Dokhtaran Shrine was prepared to revive the social and cultural activities in the area. The courtyard of Bibi Dokhtaran Shrine, as it is marked

by stars in figure 4.11, was occupied by two schools in the north and south of the tomb which resulted in the disruption of the spatial structure of this religious centre. To solve the problem, a relocation plan was introduced in collaboration with the Provincial Education Organisation to release the open space around the shrine and connect it to the nearby Abbasieh religious centre. The physical improvement of the shrine was considered as an effective factor in enriching the poor quality of the existing streetscape. These actions included the restoration of the partly collapsed dome of the shrine, restoration of the facades of the existing historical buildings and removing inappropriate additions and interventions. In addition, building an open square on the vacant lands and ruined properties in front of the shrine and furnishing it with proper facilities improved the quality of public space and create a sense of safety and security. Public space improvement integrated with the new infill development projects has enriched streetscape characteristics of the Sang-e Siah axis.

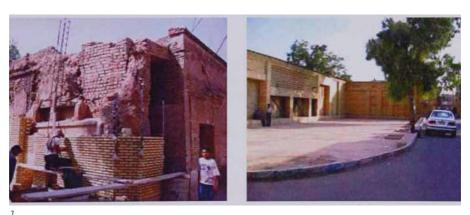




FIGURE 4.12 1: Physical restoration of Sang-e Siah passageway and constructing a new public area in front of Bibi-Dokhtaran shrine, 2004. 2: Forough-al Molk house (Left) and Bibi-Dokhtaran tomb (Right) before restoration, 1999, Source: (Izadi 2008)

Historical houses which were in very bad physical condition were restored regarding the general plan for development of tourism industry in the historical core. Restoration and adaptive reuse of this historical building not only attracts tourists and visitors but also encourages the residents to continue living in the area. Ruined and empty houses usually encourage residents to move out due to safety and security issues.

Forough-al Molk house was one of these historical houses which was built in 1831 as a private residence for a well-known merchant and was used as a primary school between 1950 to the mid-1970s. This late Qajarid residence is situated on the further side of Bibi Dokhtaran tomb and has been built based on the prevalent system of andarouni-birouni (private and semi-private courtyards). Aside from its valuable spatial and architectural elements, the house is a significant treasury of artistic decorations including paintings, lattice works, stucco, brickworks, and mirror-works. The house fell into decay because of the insufficient maintenance and inappropriate use of the property. After three years of extensive conservation and restoration works, this historical house has been transformed into a painting and calligraphy museum³³. Haj Mahya house was also acquired by a private investor who planned to convert it into a guest house.



FIGURE 4.13 An interior view of the Forough-al Molk house after transforming to Art museum.

Zone 2: The second zone of the Sang-e Siah project which also began in late 2001 is clustered around Moshir Mosque and is known as the Moshir-al Molk centre. It

Forouq-al Molk project was nominated for Cultural Heritage Conservation Awards 2005 by the United Nations Educational, Scientific and Cultural Organisation. It is now named as Meshkinfam Art Museum: http://www.meshkinfamartmuseum.com

is located to the south of Bibi-Dokhtaran complex along the Sang-e Siah axis and consists of some of the best examples of Qajar architectural structures including Moshir-al Molk mosque, Hosseniyah, Ilkhanid bath, Mirza Hadi mosque and a local bazaar (figure 4.14). The second zone also houses other significant historical structures as well as neglected open spaces and an access network which suffer from physical and structural deterioration and decay. Besides, lack of investment in infrastructure intensified the bad living conditions of inhabitants³⁴ in this area.

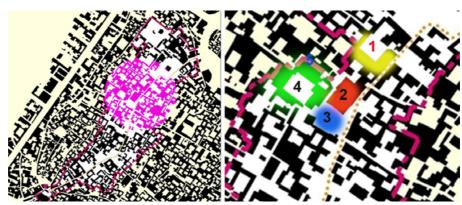
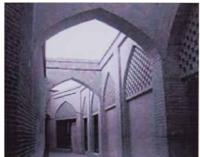


FIGURE 4.14 The second phase of Sang-e Siah project called Moshir cluster includes five distinct sub-zones of priority intervention: 1. Mirza-Hadi Mosque, 2. Ilkhanid traditional Bath, 3. Moshir square, 4. Moshir Mosque and 5. Local covered bazaar.





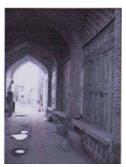


FIGURE 4.15 Moshir bazaar after restoration. The restoration program includes carpentry works, brick works, doors, ornaments and improvement of outside lighting.

The covered bazaar which gives pedestrian access to the Moshir centre suffered from

Interviews with residents of this cluster shows that sense of insecurity and physical decay and lack of activities in the public realm are among the main problems

physical deterioration which led to its abandonment. In the strategic plan, this cluster was defined as a new neighbourhood centre. Therefore, this old covered bazaar was rehabilitated to fulfil daily requirements of the inhabitants. In an effort to enhance the physical condition of the Moshir Bazaar, the major parts of the facades including carpentry works and ornaments as well as external lighting and pavements were restored. Restoration and revitalising Moshir Bazaar has had a major impact on the economy of the area and its inhabitants.

Several historical houses and public spaces were rehabilitated in order to make them more accessible to the local community and local mosques have been regenerated for regular religious activities.

Besides the conservation actions within this zone, particular attention was paid to upgrading the spatial arrangement of open public spaces as well as improving the infrastructure. Infill developments were also designed around Moshir Mosque which converted a ruined and abandoned plot into a desirable public space to provide opportunities for local activities. The newly constructed additions were designed to integrate with the historic character of the area in scale and features while at the same time being distinguished and clarified from the original historical parts. The implementation of this project has created a pleasant public realm for residents and visitors and provides a unique sense of place.



FIGURE 4.16 Moshir square before (left) and after (right) revitalisation plan.

Zone 3: The next zone is positioned in a key central place in the area as it is well connected to the eastern and western side of the urban block. Two main action areas were defined within this zone: Sibuyeh neighbourhood centre and the infill development project in front of the Armenian Church.

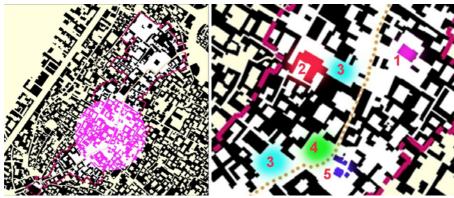


FIGURE 4.17 The third phase of Sang-e Siah project called Sibuyeh cluster including six distinct sub-zones of priority intervention: 1. Armenian Church, 2. Local library and cultural centre, 3. Neighbourhood open space and playground, 4. Neighbourhood green space and park and 5. Sibuyeh mausoleum.

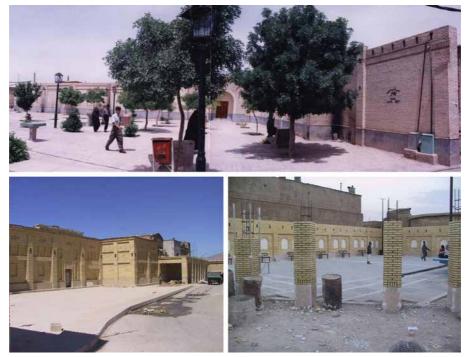


FIGURE 4.18 Rehabilitation of Sibuyeh centre includes development of Sibuyeh mausoleum (up), public space improvement and adaptive reuse of historical house (left down) and construction of a neighbourhood playground (right down).

The rehabilitation program for Sibuyeh neighbourhood centre was initiated in the first decade after the revolution and included the restoration of a historical house for a local library, construction of a local playground and spatial re-arrangement of the existing

open space. The recent project introduced a development proposal for the Sibuyeh mausoleum as well as restoration and adaptive reuse of some historical houses into the local cultural centre or economically viable activities. The project complemented the previous scheme with facade improvement of residential and commercial buildings around the square and improving public space quality.

The other focus of the new project was on revitalising vacant lands and ruined properties by restoring and adaptive re-use of the existing historical buildings. Many of these historical buildings created social and security problems for inhabitants due to their abandonment and the drug related activities they house. The residents of this area are not willing to spend leisure time in local public spaces because of the high rate of crime. Lack of urban furniture, especially insufficient street lighting and low quality pavement in passageways, accelerate this situation. To address these issues, upgrading urban furniture as well as construction of a new plaza was initiated by Shiraz municipality in collaboration with the Cultural Heritage and Tourist Organisation which resulted in a safer public domain.

In addition, sensitive infill developments of vacant lands and ruined properties and conservation and adapting re-use of the existing historical buildings led to development of neighbourhood activities and improvement of the social quality and image of the neighbourhood. A good example of these types of actions is a historical house in danger of destruction which was rehabilitated and converted into a local library and cultural centre.



FIGURE 4.19 Neighbourhood library and cultural centre (right and middle) and the local Haj Mohammad Rahim Mosque (left) which have been restored by Fars Urban Development and Revitalisation Company (left). Source: (Izadi 2008, p 219)

Zone 4 &5: The revitalisation project of Sang-e Siah quarter identifies two other distinctive zones of priority interventions: Haj Zeinal Bazaar and Kazeroon Gate. The fourth identified priority zone is located at the heart of the historical quarter of Sar Dezak in the east of Sang-e Siah quarter. The revitalisation program for this neighbourhood was concentrated on the local Haj Zeinal bazaar and historical

buildings situated around it such as the Siavoshan Mosque and historical houses of Shafiee, Anjavi and Mahalati. A series of physical improvement works on the historical buildings and a street widening plan were introduces to make this centre a more vibrant and desirable place for residents. Special attention was paid to infrastructure and public space improvement as a catalyst to the general improvement of the neighbourhood.

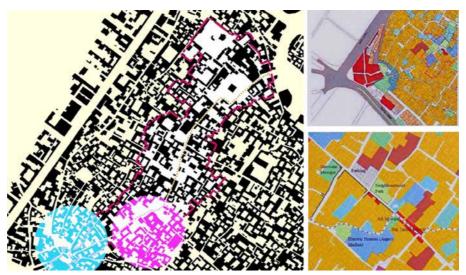


FIGURE 4.20 The fourth and fifth phase of Sang-e Siah project was focused on commercial zones of Kazeroon Gate and Haj Zainal Bazaar. Source: (Nasernasir and Mahjoub 2002, Pardaraz 2004)

The last zone, Kazeroon Gate, is located at the southwest edge of the urban core and is one of the oldest gates of the old city. A holy shrine known as Taj-ad Din Gharib is also located in this cluster and a number of historical buildings and monuments are organised around it. This cluster has a strong commercial potential both at the city and neighbourhood level.

The intervention program in this cluster defines some interrelated priorities. Restoration and improvement of Taj-e Din Gharib complex to provide a focal point in the district for both residents and visitors combined with restoration and adaptive reuse of historical houses for appropriate neighbourhood functions were among the major proposed interventions. A series of infill development projects were also introduced in order to reintegrate the border line between historic and newly developed area. Unfortunately the mentioned steps have not been completed yet and due to lack of parking areas and public transportation, the vacant lands in the area are still not organised and are being used as open parking facilities for visitors.







FIGURE 4.21 Restoration and upgrading deteriorated buildings and street façade reverse the bad image of the neighbourhood and motivates residents to participate more in maintenance and rehabilitation process.

§ 4.2.6 Sang-e Siah Project Evaluation

Due to the decentralisation strategy of central government, a degree of local autonomy was provided for the agencies involved in the area. This allowed them to act more efficiently and effectively on the major problems of this area in order to achieve desirable results. On the other hand, the complexity of issues of the neighbourhood and several involved agencies in the area required a new approach to solve problems. The plan in the rehabilitation of Sang-e Siah project represents a good example of a multi-dimensional approach in an integrated manner. The plan addressed a combination of regeneration and conservation strategies as well as infill development of vacant lots and ruined properties (Izadi 2008).

The main strategies in rehabilitation of Sang-e Siah quarter can be summarised in the following categories:

- Upgrading infrastructure and new work access
- 2 Public space improvement
- 3 Restoration and adaptive reuse of historical buildings
- 4 Tackle crime and increasing sense of public safety
- 5 Enrichment of existing businesses and regeneration of old functions

In order to evaluate Sang-e Siah project, the performance framework that has been developed in the third chapter is being used. In this framework three main aspects of the design are investigated as follows:

Physical Quality:

The evaluation of the program in this domain focuses on the visual and spatial quality of the area, especially open public spaces and its position towards heritage context such as spatial arrangement of open public spaces and physical rehabilitation of facades and entrance portals along the main Sang-e Siah axis. One of the most successful of this kind of interventions can be seen in phase three of the project where a local park and playground were constructed in the neighbourhood and the existing open space has been re-arranged in order to enrich the quality of public space in this area. These interventions were complemented by facade improvement of residential and commercial buildings around the square and enclosing the public space by designed facades and natural elements.

In the Sibuyeh neighbourhood, the residents were not willing to spend leisure time in local public spaces because of the high degree of crime as well as low aesthetic quality of the walking environment. In order to address these problems, a new series of public space improvements integrated with new infill development projects were launched that have enriched streetscape characteristics of the Sang-e Siah axis. The new development project was integrated with the existing local public space and their quality has been improved by use of urban furniture; in particular sufficient street lighting and proper walking surface.

In this regeneration plan specific attention has been paid to the main passageway of the district which connects major monuments to each other as well as to residential units. This passageway acted and still acts as the main characteristic of this area and the neighbourhood is even called after its name. Rehabilitating and restoration of this passageway, releasing occupied lands of historical buildings as well as restoration and reusing historical houses for present-day needs help this passageway to continue being the main attraction and identity of the area. The role of the Sang-e Siah axis in connecting local and urban elements to each other have been promoted which has resulted in a more vital and viable neighbourhood.

Vacant lands and deserted open spaces in front of major landmarks have been transformed to local open spaces that highlight the historical landmarks and improve the legibility of the neighbourhood. However, this design lacks the creativity of using different shapes and forms to promote diversity. This lack of diversity has not resulted in the unity of the neighbourhood either while overlooks towards and from Sang-e Siah axis are mostly providing the same and unattractive view. However, historical monuments and houses next to the axis give a special feeling to the neighbourhood and attract visitors.

MAIN QUALITY ATTRIBUTES	DEFINED IN FRAMEWORK OR/AND PROJECT		
Enclosure of public space	both		
Diversity of vistas and overlooks	framework		
Integration of old and new developments	both		
Visual integration and composition of facades	both		
Legibility of historical landmarks	both		
Connectivity within and between localities	both		
Quality of public space	both		
Unity in variety	framework		
Reusing historical buildings	project		
Restoring historical passageways	project		

TABLE 4.1 In the table above the main quality attributes and parameters in respect to physical quality are mentioned and compared with the proposed framework.

Even though most of the aspects in physical quality have been considered, there are still some shortcomings in this case. The relation between old and new has not been defined in this program and there is not any specific guideline for newly built buildings in case of facade, height and their orientation towards public areas and adjacent historical buildings. However, these regulations and standards can be added to the plan in the next phase.

Socio-Cultural Quality:

The most significant aspect of this program was its innovation in improving social engagement and sense of belonging among residents. The project attempts to bring more life and excitement into the area by executing some pilot projects. These conservation and rehabilitation projects were a vehicle for improving quality of existing historical fabric and acted as a catalyst to facilitate the gradual revitalisation of the neighbourhood. Bibi-Dokhtaran shrine for example, has become a popular place which brings together a group of women every day for social and recreational purposes as well as religious ones. These kinds of public gatherings and social interactions in the neighbourhood define a unique identity in the urban environment.

On the other hand, stimulating the inhabitants to continue living in the area is an essential factor in reinforcing and safeguarding the lively urban character of the historical neighbourhood. This strategy has been accompanied by a series of neighbourhood revitalisation incentives proposed by the local authority and also the central government. Recently the city council approved a new regulation which exempts owners of listed buildings and other historical houses in conservation areas from levies on building and land (building permits). Meanwhile, giving the building owners access to easy and direct grants from the central government (CHTO) including a grant for preservation and physical improvement and a grant to convert the buildings

for the use of tourists, provided a proper setting to foster a gradual process of the neighbourhood revitalisation by its inhabitants.

Maintenance and re-use of old buildings as well as giving new cultural functions to them encourage neighbours to get involved in cultural activities on one hand and attract visitors from the whole city on the other hand. One of the most successful projects in this case was extensive conservation and restoration of the Forouq-al Molk historical house and transforming it into painting and calligraphy museum. As mentioned before, this project was nominated for Cultural Heritage Conservation Awards by UNESCO in 2005. Upgrading and enhancement of public spaces which connect monuments, houses and public facilities can provides a focus for social and cultural activities and strengthen the sense of civic identity and place attachment.

The project had an emphasis on the physical rehabilitation of key elements of this area in order to revitalise their original roles and functions at the neighbourhood level. However, the area contains a number of magnificent places such as Moshir Mosque (1848-57) which acts as a religious centre at neighbourhood level as well as city level. Restoration of this listed building complemented by the development of a new public space in front of its entrance has transformed this area into a desirable place for both inhabitants and visitors.

From the beginning the main objectives of the plan was to improve the quality of life, revive the historical elements, enhance the image of the area and attract visitors. It is very important that improving the quality of living of residents is at the top of the objectives list. Equality of residents' needs and tourism infrastructure is obvious in the design framework. Although attracting visitors to this neighbourhood was also mentioned as an objective, the plan had an emphasis on facilitating the gradual rehabilitation of existing residential units, avoiding large scale interventions and focusing on providing necessary infrastructure for the area without any planning restriction for the inhabitants. In addition the plan organised a combination of conservation and development activities around the main spine of the area without any interventions in the residential domain (Izadi, 2008). The strategy of avoiding large scale interventions prevented the occurrence of gentrification or abandonment of the residential units

Although this program is notable for stimulating a gradual process through investing on infrastructures and compactness of the neighbourhood, it lacks a proper connection to other parts of the modern city. The other shortage in the planning and design phase of this project is consideration of traffic flow inside and around this urban block. In order to attract visitors from other parts of the city, sufficient parking facilities and infrastructure should be provided to make this neighbourhood a new hub of tourist attraction.

There is still a serious shortage of parking for visitors and in some cases even for residents. Public transport is not efficient enough either. In general the project did not consider accessibility of this urban block and its connection to neighbouring urban blocks. Although solving infrastructure problems at this scale were not defined as main aims of this project and is more related to urban management of the whole city of Shiraz, It is a criterion that is missing in the planning and design phase of this project. Community participation is mentioned in the design report however it has been ignored in the decision making and planning process. It is essential to put more energy and consideration into this aspect.

MAIN ATTRIBUTES	DEFINED IN FRAMEWORK OR/AND PROJECT			
Hierarchy between public and private	both			
Social engagement of residents	both (in the project it was lacking in decision making and planning phase)			
Walkability and pedestrian convenience	both			
Cultural Significance	both			
Human scale	both			
Perceivable basic layout	both			
Sense of belonging	both			
Equality of various groups in accessing opportunities	both			
Accessibility	framework			
Gradual intervention and avoiding large scale interventions	project			

TABLE 4.2 In the table above the main attributes and quality parameters in respect to socio-cultural aspects are compared and categorised according to the proposed framework.

Functional Quality:

In this program there was an emphasis on a gradual process of physical rehabilitation and economic improvement of the neighbourhood which was facilitated through the creation of necessary conditions for residents. Improvement of infrastructures, development of required services and functions and upgrading of public open spaces motivates the inhabitants to continue living in their homes and acts as a great motivation force to get others involved.

In order to do that, local shops and everyday needs have been provided next to the main neighbourhood axis, Sang-e Siah axis. Restoration of the local bazaar and upgrading pavement and access encouraged residents to use these local shops for providing their needs. Furthermore it made automobile use in the neighbourhood unnecessary as all the area is accessible and compact enough to walk around. Apart from shops and

services, there are cultural, educational and religious centres available in the urban block for residents which improves the local autonomy of the neighbourhood.

In the last two phases of the project execution, Kazeroon gate has been organised as the southwest edge of the city centre and defined as one of the main entrances to the historical core. Taj-ad Din Gharib Shrine and the cluster of old buildings around it has been restored and reused to play a major role in the daily activities of the neighbourhood and city by its obvious commercial and economic potentials. This will lead to a more alive neighbourhood with arranged and organised facilities along its main axis. This gives its residents a large number of alternative choices and opportunities and improves the social interaction between residents and visitors.

In Iranian urbanism tradition there is an open public space or square at the main intersection of the pathway of each neighbourhood system. This open space provides social (such as gathering, chatting and acting as playground for children), cultural (in the shrine, Imamzadeh, Hosseiniyah, or other communal gathering place) and commercial (in the local markets or shops located around the squares) activities and is usually located within a short distance of residential units. Thus, these community centres acted as major forums for social and cultural interaction. However, the transformation of spatial and functional structure of these public spaces together with physical decay during the last decades diminished this role. A series of sub-projects were proposed and executed to revive this role through physical improvement activities such as upgrading street paving, public lighting, facades and storefronts; upgrading of public utilities; and also decreasing spatial disorder and functional fragmentation by physical rearrangement and re-concentration of local functions.

MAIN ATTRIBUTES	DEFINED IN FRAMEWORK OR/AND PROJECT		
Mixed land use	both		
Balance of residential and public territories	both		
Local autonomy of the neighbourhoods	both		
Various alternative choices	both		
Density of public space	both		
Integrating heritage into design	both		
Equality between tourists' and residents' needs	Both(the project lacks tourist infrastructures)		
Opportunity for social interaction	both		
Multi-functional and multi layered	framework		
Branding area with new activities	project		
Redevelopment of key sites for public facilities	project		

TABLE 4.3 In the table above the main quality parameters and attributes in respect to functional quality are compared and categorised according to the proposed framework.

This program reached a high level of quality in this domain due to the adaptability of the gradual rehabilitation of the area. Diversity of functions and activities in open public areas as well as cultural and religious activities in reused historical monuments gives enormous vitality and self-reliance to the neighbourhood and encourage social involvement of the inhabitants. The area has transformed into a hub for art and social activities and has already hosted few art festivals and gatherings at city level due to its attractive and monumental route.

§ 4.3 Shah-e Cheragh Case Study

Shah-e cheragh project has been selected as a case study in this research because of its distinctive situation in the historical core of Shiraz. The presence of significant religious monuments has led to a number of large scale redevelopment projects in the past and massive destruction of historical houses and the traditional morphology of the neighbourhood. Bavand Consultant Office has designed this project with the main goal of reaching a balance between development of the area to increase mobility of its pilgrims on one hand, and restoring the historical structure and morphology of the area and its monuments on the other hand. In order to have better understanding of the situation, historical background and previous urban interventions in this area will be studied in the following pages.

§ 4.3.1 Background of Shah-e Cheragh Quarter

The project area covers the central block in the historical core of Shiraz which has been created by 1920-30 imposed avenues and streets which cut through traditional neighbourhoods. This area originally includes the historical quarters of Darb-e Masjed, Bazaar-e Morgh (bird market) and small parts of Bala-kaft and the Jewish quarters. These quarters do no longer exist spatially but their names are still used by inhabitants and older shopkeepers (Figure 4.22).

The project area is approximately 55 hectares and its boundaries are defined by Lotfalikhan Zand Street in the north, Dastgheib Street in the west, Astaneh Street in the south and Zeinabieh Boulevard to the east. Lotfalikhan Zand Street as well as the ring road at the edge of the historical core on the west and east side link this area to the Shiraz road network.

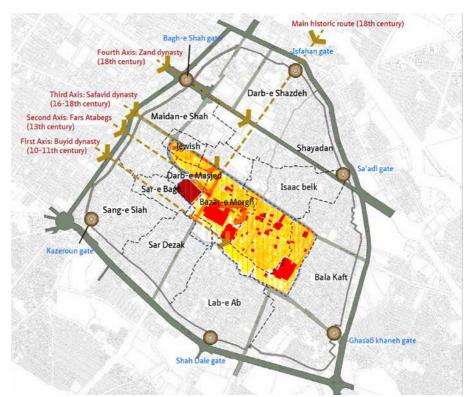


FIGURE 4.22 The boundary of the Shah e Cheragh block defined by new imposed streets on the north and Bein ol Haramein project in the south. Source: drawn by author after (Afsar 1986)

EEven though the main monuments of this area are religious shrines, the dominant land use of the area is residential (31.1%). The religious-cultural land use including mosques, shrines, religious schools and cultural activities occupy more than 1/6 (17.7%) of the whole area. A large area of 13.2% is under construction or holds vacant lands, this area is mostly related to the Bein ol Haramein project which has been started around 20 years ago and is still not finished³⁵. This large percentage of vacant lands has led to social and visual destruction of the area. However, after completing this huge project the percentage of vacant lands will be reduced a lot (see figure 4.24) and some cultural and commercial facilities will be added to the area. However, these locations (such as an exhibition and conference centre) and their cultural activities will act more at city level than neighbourhood level.

The project was started in 1995 by demolishing around 5 hectares of the historical core with the idea of connecting two shrines with an open passageway the same as the one in Karbala, Iraq which is one of the main pilgrimage destinations of Shite Muslims. However, the first guiding principle of the construction of a straight street (450 metre long and 110 metre wide) to allow free circulation of traffic through the historical urban fabric changed to the construction of modern commercial complexes and other profitable investment in the area. Source: Izadi, M. (2008). A Study on City Centre Regeneration: A comparative analysis of two different approaches to the revitalisation of historical city centres in Iran. PhD thesis, Newcastle University.





FIGURE 4.23 Building process of Bein-ol-Haramein project between 2003 and 2013. Reference: google earth, 2003(up) and 2013(down)

Despite of high residential land use, the area dedicated to neighbourhood services (1.2%) and green spaces (0.2%) is very limited and these should be developed and expanded in future revitalisation plans. There are three main bazaars in the area, two of which are historical and located in the northwest and north of the urban block (Zargarha(Goldsmith) Bazaar and Haji Bazaar) and the third one is a recently built linear shopping alley which has formed next to Shah Cheragh shrine in west of the area. The rest of the shopping area has been expanded next to Zand Street, the main street in the north. Figure 4.25 illustrates the ratio of land uses that presently exist in this area. This block contains over 1005 residential units, with 6000 inhabitants (this number is according to 2006 statistics which shows a 12% reduction of population compared to 1996 when the population was 6796 inhabitants) (Bavand 2010). The historical and cultural significance of this urban block can be determined by numerous valuable and famous religious buildings that it houses and also a part of an historical bazaar that connects this urban block to the northern part of the urban core.

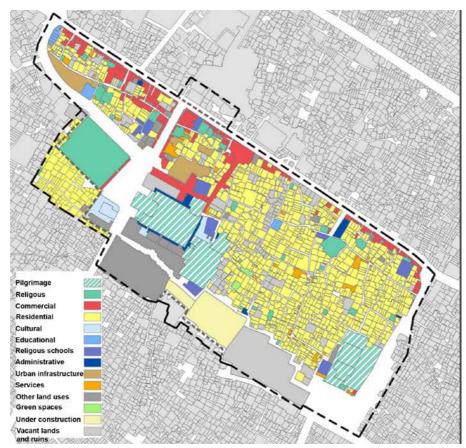


FIGURE 4.24 Major land uses that exist in the area. Source: (Bavand 2010)

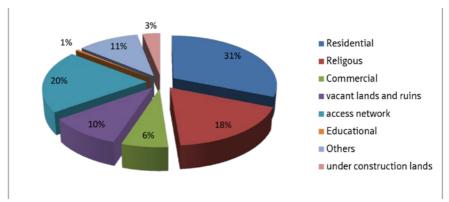


FIGURE 4.25 Existing land-use allocation in the historical quarter of Shah-e Cheragh, drawn by author with the data from (Bavand 2010)

§ 4.3.2 The Area of Intervention in Shah-e Cheragh Project

Although the Shah-e cheragh area has gone under few local interventions, there are still few unfinished projects related to the new comprehensive plan for historical core of Shiraz which are still in realisation process. The most famous project in this region is called Bein ol Haramein (literary means between two shrines). In 1995 the municipality of Shiraz planned to create a new and main passage way in the south of this area by buying and deconstructing the houses between two shrines (see figure 4.26). The religious authorities were supporting this design financially, but the idea was transformed completely because of the municipality plans to make a huge commercial centre in order to not only finance the land ownership but also profit from the new units. However, high level of destruction (around 6 hectares, which is 12% of the whole urban block) and discussions between municipality, Cultural Heritage Organisation and the religious board of the shrines disrupted the project and it has been left unfinished for many years.



FIGURE 4.26 Two major monuments of the area (Shah Cheragh Shrine and Astaneh Shrine) and Bein-ol-Haramein project which was designed in order to connect them together and make them more accessible for visitors and pilgrims.

Recently the project is again back on track and about one third of the project, the western part, has been built including a commercial complex. The middle part, which was left unfinished at concrete structure level, is going to finish in 2016 as a cultural complex consisting of galleries, cinema and conference centre while the eastern part is designed for administration offices (see figure 4.27).



FIGURE 4.27 The plan and execution of the Bein-ol-Haramein project.

Another significant project in this urban block is the restoration and development of Zargarha Bazaar (Goldsmith bazaar) in the northwest corner of the quarter. This branch of the bazaar houses jewellery, gold and silver shops and warehouses and due to its separation from the main bazaar in the north coped with some physical and social problems. Designing and defining a new entrance to the bazaar, restoration of the facades and conservation of some historical houses in the area and re-using them as art and goldsmith centres are some of the main activities of this project (see figure 4.28).



FIGURE 4.28 Rehabilitation plan of Zargarha Bazaar and the area around it. Source: (Pardaraz 2004)

In the new rehabilitation project of Shah-e Cheragh quarter the main focus is on the religious shrines and facilitating access and accommodation of pilgrims. Making space for future expansion of shrines and infrastructure for religious centres and also defining the Shah-e cheragh shrine as the main monument and land mark of the quarter were emphasised in this program. In order to have a better understanding of the program and its approach it is useful to review potentials and weaknesses of the area.

§ 4.3.3 Strengths and Weaknesses of Shah-e Cheragh Quarter

This area has experienced radical and destructive large scale redevelopment plans around its religious and pilgrimage centres which resulted in deterioration of the traditional structure and houses in the area. Apart from presence of touristic monuments in the area, which is a potential and at the same time a challenge for the neighbourhood, there are some major issues with Shah-e Cheragh quarter. Bavand Consultant Office, which is responsible for the Shah-e Cheragh rehabilitation project, has listed the following major problems and potentials of this quarter

Low physical quality of the area: Many buildings in the area are being used as accommodation for workers and immigrants from neighbouring cities and countries in order to work in the nearby bazaar or warehouses. Historical courtyard houses of one or two stories have been divided into smaller parts to maximise the profit for the owners. This misuse and lack of proper restoration and maintenance has led to deterioration of these old buildings. In figure 4.30, the quality of buildings in the area is demonstrated. Near 51% of the buildings in this quarter need restoration and maintenance while only 14% are newly built or proper to live in (Bavand 2010). Abandonment of the historical buildings and lack of maintenance, and in some cases using monuments as storage areas resulted in a bad image and low spatial structure of the area. Lack of economic and social justification hinders any private investment in the area while low-income residents of the area cannot afford the costs of restoration and improvement of their houses.

Transformation of social characteristics: Most wealthy families moved out of their old district and live in the newer areas of the city because of their proper facilities such as parking spaces, security, better quality access and better public and recreational space. Apart from population reduction during the years 1996-2006, another significant change in demographic charts related to this urban block (also visible in other parts of the city core) is the change in sex ratio³⁶ of inhabitants. Gender ratio in 1996 was

The human gender ratio is the number of males for each female in a population.

98.6% while in 2006 it increased to 110.5%. This indicates the moving out of families from the neighbourhood and replacement by immigrant workers from small villages or neighbouring countries that work and live alone in the decayed houses of the historical core (see Table 4.4).

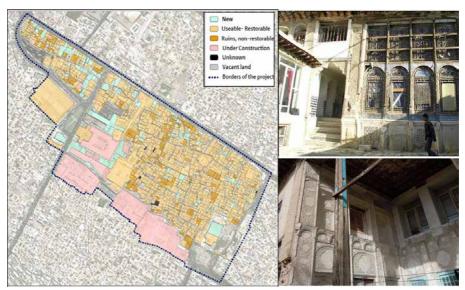


FIGURE 4.29 The quality of buildings in the area is illustrated in this map. Most of the units need restoration or conservation in order to be usable. Source: (Bayand 2010).

This demographic and social change gives rise to different demands and needs and in the long run resulted in social fragmentation and cultural problems. One of the main problems in this case is the lack of civic responsibility and attachment towards public space from the new users and residents. This change in cultural values led to lack of any concern about public space and lack of belonging to their environment.

YEAR	POPULATION	MALE POP.	MALE POP. %	FEMALE POP.	FEMALE POP. %	SEX RATIO
1996	6796	3374	49.6	3422	50.4	98.6
2006	5956	3123	52	2825	47	110.5

TABLE 4.4 Population and sex ratio change between 1996 and 2006. Source: (Bavand 2010)

Poor accessibility and connectivity: One of the main problems of the historical core which has been mentioned in previous and current city plans is poor accessibility to other parts of the city and within the neighbourhood. Lack of sufficient parking and automobile access to many residential units even in emergency condition are also mentioned in interviews with residents. On the map below, vehicular accessibility of

the area is illustrated. More than 50% of the residential areas are only accessible via pedestrian routes and in most of the cases even emergency vehicles cannot access these places. It is necessary to reach a smart balance between advantages of car accessibility and spatial integration in this district.



FIGURE 4.30 According to the interviews limited automobile access and lack of parking spaces are key issues of this area. In this map, the units with red colour do not have any possibility to be reached by car or other emergency vehicles. Source: (Bavand 2010)

Insufficient services and infrastructures: The residential units in this district, like other parts of the old city, do not have an efficient sewage and drainage system due to

deterioration of the buildings and narrow passageways. Gas connections were also not built according to standard safety regulations. These issues have resulted in damage to valuable historical façades of houses and in some cases health problems for residents.

In addition to insufficient infrastructure for residential units, this district has a serious problem regarding the large number of visitors and pilgrims that are attracted by its significant religious monuments. There are not enough services for visitors, ranging from restaurants and shops to accommodation. This has resulted in food shortages and hygiene problems for residents, pilgrims, religious and local authorities.

Although this area has serious problems regarding infrastructure, access and facilities, the Shah-e Cheragh neighbourhood has significant potentials that should be addressed and used as assets in the rehabilitation plans of the area:

Traditional structure and significant collection of monuments: Shah-e Cheragh district houses many significant monuments which attract visitors from other parts of the city and country, and in some cases from other countries. 29% of the buildings in this area are older than 85 years and many of them have been registered by the National Heritage Organisation as historical and protected buildings. Although these old and historical structures are costly to maintain and preserve, they can also act as a potential to attract cultural visitors and investors to the area and bring prosperity and vitality to this neighbourhood.

Religious monuments: Religious buildings, especially mosques and shrines, are the most significant features of the urban landscape and dominate the skyline of the historical core of Shiraz (Clarke 1963). Besides Old Jame Mosque, New Mosque and Nasir-al-Molk Mosque that attract both worshippers and tourists, Shah Cheragh shrine is the third pilgrimage destination in the country and also Seyed Alaeddin shrine plays a significant role in bringing pilgrims to this district. Many of the former residents prefer to return to the old city for religious festivals. They participate in the collective ritual activity in Shah Cheragh shrine. While men are more associated with the mosques and formal ritual gatherings, women are more active in local pilgrimage (Betteridge 1985). These collective ritual activities not only bring vitality and sense of life to the area but also can attract many investors to invest in tourist and pilgrimage infrastructure and services.

Considering the challenges and the place attachment of residents towards their neighbourhood, revitalisation of the area and upgrading the conditions of living and enabling people to continue living in their houses can help the area to reverse its decay and abandonment process. Religious authorities can finance a large percentage of the project from national funds which can give a boost to improvement of the social and physical condition of the area.

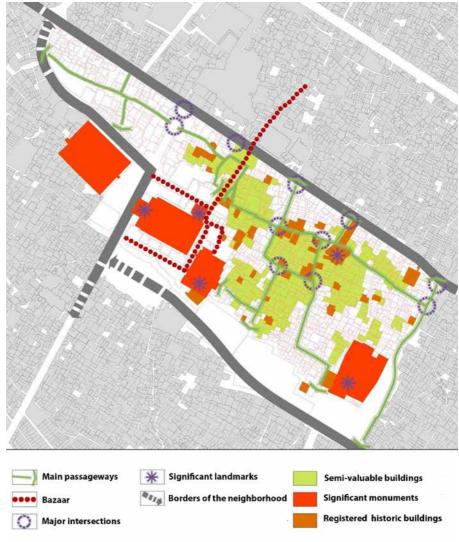


FIGURE 4.31 The historical structure of the neighbourhood is illustrated in this image. Most of the significant and registered historical buildings are located alongside main passageways. Source: (Bavand 2010)

§ 4.3.4 Policy and Approach of Shah-e Cheragh Project

In this section the urban design intervention in Shah-e Cheragh quarter is investigated through different phases of policy, decision making, design and execution. The purpose of this part is to investigate the driving forces behind this project in the heart of old city of Shiraz and its approaches towards reaching its major aims.

As mentioned before, Shah-e Cheragh quarter not only houses significant buildings and monuments such as Nasir ol-Molk Mosque, New Mosque, various historical houses and public buildings, but also has an important position in the historical city due to the two shrines it houses. Shah Cheragh shrine is the third most important shrine in Iran and attracts many pilgrims every year. The other shrine, Astaneh shrine, is situated on the eastern end of the area and there have been many efforts by religious authorities to connect these two shrines with public open spaces and new developments. A huge number of houses between these two shrines has been destroyed in order to connect these two shrines with a pedestrian passageway for pilgrims, but unfortunately this idea has not been implemented. The municipality has replaced the whole public open space for pilgrims by a big shopping mall with some cultural activities. Religious authorities stopped the project and the construction site has been left unfinished for almost a decade. Having this huge vacant land in the area and also other neglected old houses in the district accelerated the physical deterioration and decay well as social and crime related problems.

The Shah-e Cheragh Project was proposed in order to reach a balance between the development of the area, aimed at providing necessary services and mobility for pilgrims, and restoration of the area, reversing the dramatic situation of residential areas described above and restoring the historical morphology of the district.

In summary the main goals of this project were defined as below:

- Expansion of the Shah Cheragh complex to urgently provide pilgrimage and tourist public spaces and services
- Determination of the future of abandoned land in the southern extent of the area (Bein-ol-Haramein project)
- Directing the car traffic from west and northwest of the area towards the south and removing it from Astaneh square in order to provide safe and easy access for pedestrians and cars to pilgrimage areas.
- Restoration and upgrading old and deteriorated fabric of residential areas around the shrines.

In order to reach these goals, three types of interventions have been defined. The first group was defined as intense intervention by projects at national, regional and urban

scale such as constructing new development areas around the shrines, completing the Bein-ol-Haramein project and execution of a western passageway in order to redirect the traffic south. This part of interventions was mainly financed by the national budget and also religious authorities' funds. The second group consists of gradual interventions which will be executed and financed by private investors. Two of the most important projects in this category are the Persian cultural axis and the tourist and pilgrimage axis. The Persian cultural axis runs from east to west and involves gradual restoration and reuse of historical buildings and also reconstruction of new cultural spaces in vacant lands. The north south tourist and pilgrimage axis provides accommodation and tourist facilities for pilgrims and visitors. The third category consists of small projects and renovations that are financed and executed by residents and shop keepers based on the guidelines and regulations of the Shah Cheragh project. In figure 4.32 protected areas and the three previously mentioned types of interventions are shown.

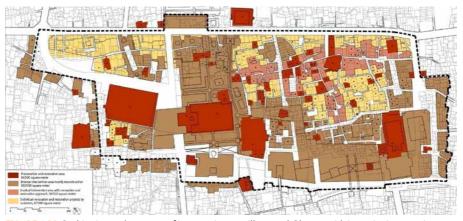


FIGURE 4.32 In this picture three types of interventions are illustrated: 1) areas with intensive interventions, 2) areas with gradual renovation and restoration projects by private investors and 3) residential units with small restoration and renovation interventions by their residents. As you can see the valuable historical monuments are divided between all these three areas. Source: (Bavand 2010)

Apart from pilgrimage activities of Shah Cheragh Shrine, the mausoleum is also important due to its architectural and historical values. The Shah-e-Cheragh Mausoleum was registered under No. 363 in the list of the national monuments of Iran in 1940. It contains decorative works such as mosaics of mirror glass; the inscriptions in stucco, the ornamentation, the doors covered with panels of silver, the portico, and the wide courtyard are the most attractive features. Two short minarets, situated at each end of the columned portico, add impressiveness to the Mausoleum and to the spacious courtyard which surrounds it on three sides.

With respect to the social, historical and spatial position of Shah Cheragh shrine in the district, Bavand Consultant Office has considered the following principles in the design process this project:

- Scale: proportion of mass and open space and the size of adjacent developments and designs should not be competing with the shrine complex.
- Function: There is a serious shortage of supporting services for pilgrims of the shrines that makes the enlargement and development of the complex inevitable. In addition, some irrelevant and disturbing activities should be removed from the area and some compatible land uses such as cultural spaces, accommodation facilities and public open spaces should be injected to the area.
- Mobility: the main problem for pilgrims is to access the shrines from other parts of the city. Although accessibility and the quantity of public transport have been improved in recent years, there are still some serious problems in pedestrian routes and safety issues regarding both car and pedestrian traffic. In order to solve this problem, this project tries to omit the passing traffic from areas related to shrines and pedestrian routes. Furthermore sufficient parking areas should be offered to pilgrims and visitors. In figure 4.33 the area dedicated to parking and connecting routes towards the shrines and other parts of the district are illustrated.

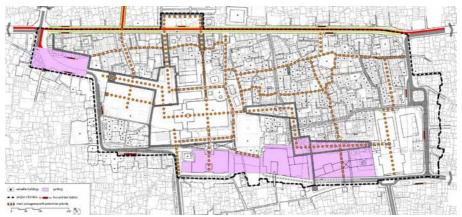


FIGURE 4.33 In this schematic map, the structure of pedestrian routes and parking facilities are designed in order to address this problem. Source: (Bavand 2010)

§ 4.3.5 Design Description of Shah-e Cheragh Project

The first spatial concept was to signify the spatial structure of the area by using and mobilising the current passageways and public areas. To create a sense of place and belonging to the area, which is lacking in the current situation, new open and semi-open corridors were designed in order to walk through the neighbourhood. To acknowledge the project district as the heart of historical city, these passageways were also designed in a way to connect this block to adjacent urban blocks. These corridors act as veins of a leaf: injecting life and vitality inside the neighbourhood. As mentioned before, most of the valuable monuments are also located alongside these passageways and can be reused in order to mobilise and signify these routes. A schematic sketch of the first concept can be seen in the picture below (figure 4.34).

The area was divided into eight zones with different activities and time of execution. In the following pages the different zones, major activities and financing situation of the interventions will be explained briefly. The numbers and maps are derived from the second volume of the Development and Restoration of Shah Cheragh District report which was prepared by Bavand Consultant Office in 2011 (Bavand 2011).

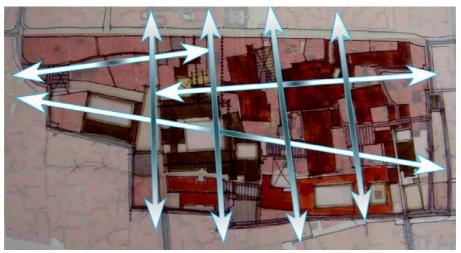
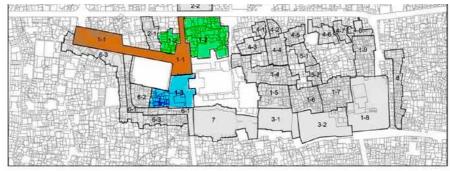


FIGURE 4.34 Shah-e Cheragh project tries to define some major axes in the area in order to encourage urban mobility and attract more visitors to the area from neighbouring quarters. Image after (Bavand 2010)

Zone one: Zone one consists of 8 small blocks with religious and residential functions. Due to their location, adjacent to both shrines and one of the main passageways of the area, the design determined new types of activity for this zone.



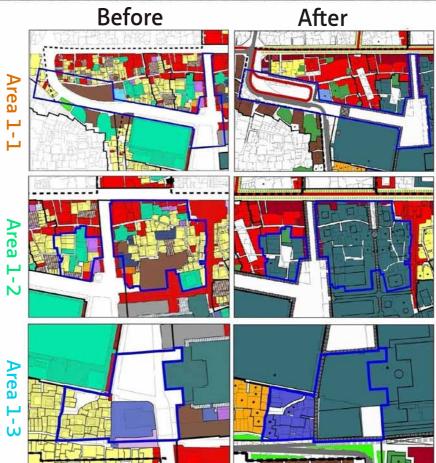


FIGURE 4.35 The current and suggested land use map of the sub zones 1-1, 1-2 and 1-3. This area will make space for new urban street to provide accessibility for the area and also the expansion of Shah Cheragh shrine. Drawn after (Bavand 2011, pp. 38-40)

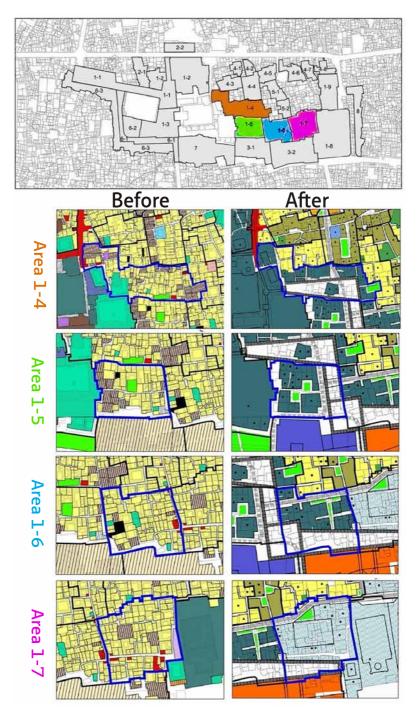
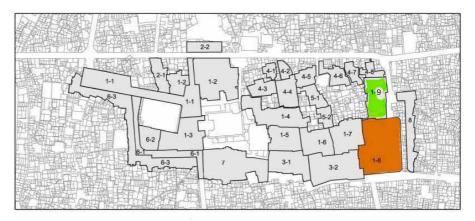


FIGURE 4.36 The current and suggested land use map of the sub zones 1-4, 1-5, 1-6 and 1-7. These areas with mainly residential land use will be transformed and renovated in order to make space for the expansion of Shah Cheragh shrine and its connection with Astaneh Shrine. Drawn after (Bavand 2011, pp. 41-44)



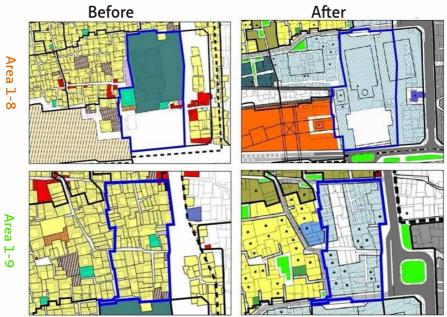


FIGURE 4.37 The current and suggested land use map of the sub zones 1-8 and 1-9. These two sub zones are mainly specified for expansion of Astaneh shrine and providing facilities for the religious educational centre. Source: (Bavand 2011, pp. 45-46)

These blocks are mainly defined as pilgrimage service and tourist information activities and dedicated to the expansion of facilities around the shrines and future development of their functions. These interventions were defined as focused or intense intervention in the project report and are financed by national and regional funds in order to expand the shrine activities. The open area at the border of the district was organised and beatified in shape and acts as a traffic hub for tourists and pilgrims.

In block 1-1, 39 units with residential (1.200 m2), commercial (800 m2), parking (4.700 m2) and some other activities have been transformed to pilgrimage service functions (7.500 m2) and a main parking facility with an area of 12.000 square meter (Bavand 2011, p. 38).

Block 1-2 with 121 units was a more mixed activity block with various activities such as residential (11.700 m2), cultural (3.100 m2), religious school (3.100 m2), commercial (6.700 m2) and medical activities (1.850 m2). In the new design program this block is mainly considered as educational facility for the shrine, resulting in expansion of these activities to 25.000 square meters (Bavand 2011, p. 39). Block 1-3 is also defined as service facilities with a focus on accommodation facilities for pilgrims (22.000 m2) and cultural activities such as library and religious museum (20.000 m2) (Bavand 2011, p. 40).

Block 1-4 contains 102 units with mainly residential activities (10.600 m2) and more than 4.800 square meter of ruined houses and properties which are abandoned and out of use. In this program this block is defined as cultural (10.000 m2) and educational facilities (15.000 m2) for the shrine and pilgrims. Apart from that more than 10.000 m2 is dedicated to parking facilities for users (Bavand 2011, p. 41). Block 1-5, 1-6 and 1-7 with more than 28.900 m2 residential units and 4.500 m2 of ruined and abandoned properties, will transform to a religious research centre with 15.000 m2 area, library and cultural facilities with 15.000 m2, cooking and food-related facilities for the shrine (12.000m2) and 10.000 m2 of parking facilities (Bavand 2011, pp. 42-44).

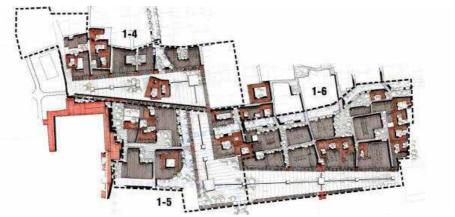


FIGURE 4.38 A schematic design of the sub zones 1-4, 1-5 and 1-6 produced by Bavand Consultancy. The historical houses are being used to define a pilgrimage pathway between two major shrines of the area with accommodation facilities along it. Source: (Bavand 2011, p. 48)



FIGURE 4.39 A schematic Cross section of zone one prepared by Bavand Consultancy which illustrates the underground parking facilities and pedestrian pathways on the ground floor. Historical houses are being restored and reused in order to provide cultural facilities in the neighbourhood. Source: (Bavand 2011, p. 50)

In block 1-8, more than 5.000 square meter is considered as residential usage but in reality these units are dedicated to clergymen and religious students who come to study in the educational centre of the shrine (Bavand 2011, p. 45). A new entrance to the religious complex and related services has been designed next to the main street in order to connect the district to neighbour districts. The major activity in block 1-9 is residential with more than 13.000 square meters but in the new design it will transform to cultural and tourist facilities related to the shrine (Bavand 2011, p. 46).

The total area of zone one is 219.000 and it is mainly dedicated to shrine expansion (Bavand 2011, p. 34). This zone is not acting as a residential neighbourhood and is considered to provide facilities for pilgrims and students who come to the shrine mainly from other cities.

Zone two: Zone two is also mentioned in the report as an area of focused intervention. This area with less than 15.000 square meter consists of the development of urban spaces towards the shrine in order to interconnect Shah Cheragh shrine to the historical Vakil Bazaar on the one hand and ensure accessibility to both shrines from main urban streets on the other hand (Bavand 2011, p. 34).

In block 2-1 almost all of the residential units are going to disappear and make space for commercial units around a small square and this will later be connected to the Vakil Bazaar on the other side of the street. Block 2-2 defines as an open space in order to highlight the bazaar and commercial complex on the other side of the street and tie two urban blocks to each other. It will make the Shah Cheragh district more walkable and connected to the whole city and can bring economic growth and higher land value to the district.

This part of the project is also financed by national and regional budgets to highlight Shiraz as a pilgrimage city and to extend the influence of Shah Cheragh shrine into other parts of the city.

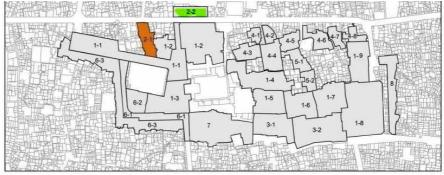




FIGURE 4.40 The current and suggested land use map of zone 2. These two sub zones are mainly specified to connect the neighbourhood to Vakil Bazaar. Most of the suggested land use for this zone is therefore commercial and provide a line of shops around open public spaces to make the neighbourhood more accessible by pedestrian visitors and tourists of Vakil Bazaar. Source: (Bavand 2011, pp.52-53)

Zone Three: Zone three is also mentioned as an intense intervention zone in the design report and is focused on providing facilities for the Bein-ol-Haramein project (Bavand 2011, p. 36).

Block 3-1 consists of cultural activities such as galleries and a congress centre while block 3-2 is more focused on commercial units and a shopping centre including accommodation facilities for tourists and pilgrims. More than 35.000 square meter is considered as parking space in this zone (Bavand 2011, pp. 55-56).

As you can see in the figure 4.42, this zone has been destroyed some years ago in order to build a new development project named Bein-ol-Haramein. The picture is taken from its situation before implementing the case study project.

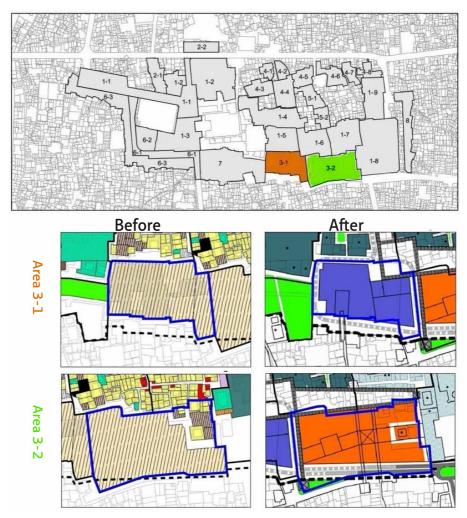


FIGURE 4.41 The current and suggested land use map of zone 3. These two sub zones are mainly specified to provide cultural activities for bein-ol-Haramein unfinished project. Source: (Bavand 2011, pp. 55-56)



FIGURE 4.42 A panorama view of the situation in zone 3 before starting of the project. As you can see only a small part of Bein-ol-Haramein project has been partly executed and other parts including zone three were left unfinished.

Zone Four: Zone four is allocated to the Persian cultural axis of the project. The interventions and redevelopment plans for this area are financed and executed by private sector investments. This zone is mainly assigned for handcraft workshops and art galleries in order to attract not only the pilgrims but also tourists who come to Shiraz and are interested in visiting and buying local products and handmade artefacts. This area consist of valuable historical houses and the plan is to restore and reuse this buildings for demonstrating (such as museums) and producing (such as small workshops) handicrafts and also providing facilities for tourists such as traditional restaurants and accommodation. In blocks 4-1, 4-2 and 4-3 from more than 10.000 square meter of residential units only 5.000 m2 will keep their function and instead more than 13.000 m2 is assigned to accommodation facilities for tourists. Workshops and shops to sell the local products and handmade artefacts will occupy more than 5.000 m2 (Bavand 2011, pp. 58-60).

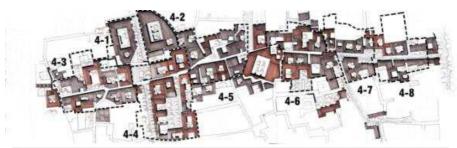




FIGURE 4.43 The picture below is a schematic design of zone 4 produced by Bavand Consultancy. The historical houses are being reused to make space for handicraft workshop and shops along the Persian axis of the project. Galleries and museums on Persian art are also defined along this pathway. Source: (Bavand 2011, p.68)

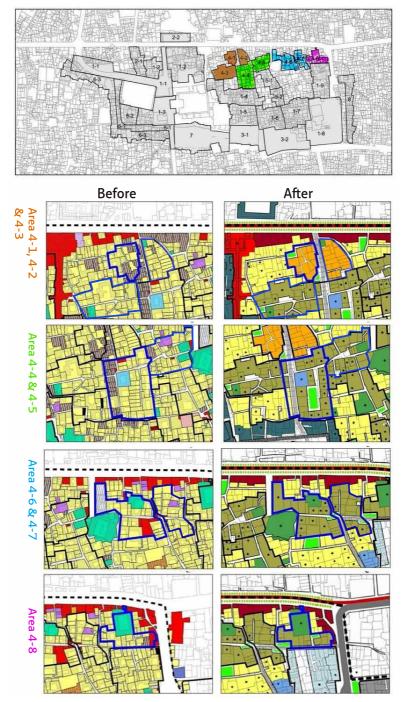


FIGURE 4.44 The current and suggested land use map of zone 4. These zone is located along the Persian axis of the project and is mainly specified to provide cultural and handicraft activities along the axis. Source: (Bavand 2011, pp. 58-65)

In blocks 4-4 and 4-5, with residential activities of 11.000 m2, only 3.000 m2 will remain residential and the major activity of the area will be allocated to tourist accommodation (6.000 m2), other tourist facilities such as restaurants and tea houses (3.000 m2) and kilim rugs warehouses and shops (6.000 m2) (Bavand 2011, pp. 61-62). In blocks 4-6,4-7 and 4-8 only half of the residential units remain as houses (5.000 m2 out of 10.000m2) and the rest is transformed to accommodation facilities (4.000 m2) (Bavand 2011, pp. 63-65).

The cultural and religious buildings are expanded to 3.000 m2 and more than 6.000 m2 commercial units are added to the block in order to produce jobs and attract tourists to walk through these parts of the urban block.

Zone Five: In zone five only less than half of the residential units (4.000m2 out of 9.500 m2) keep their function and instead more than 6.000 m2 accommodation facilities and guestrooms are added to the area. The interventions in this zone are also financed and executed by private sector and the main aim of the redevelopment program in this zone is to connect the Persian Culture axis to the shrine complex and facilitate the connectivity and accessibility of the neighbourhood.



FIGURE 4.45 The schematic design of zone 5 produced by Bavand Consultancy. The historical houses are being reused to provide accommodation for cultural activities. A connecting passageway Passes through this zone and connects two main axis of the area (Persian Cultural axis and Pilgrimage axis). Source: (Bavand 2011, p. 73)





FIGURE 4.46 The current and suggested land use map of zone 5. This zone is located near Persian cultural axis and is planned to provide accommodation facilities for this pathway. Open local spaces are designed along the connecting pathway between Cultural axis and pilgrimage axis. Source: (Bavand 2011, pp. 71-72)

Zone Six: This zone with the total area of 45.500 m2 is also defined as intensive intervention zone in the project and is entitled as the first step in the execution process of the project (Bayand 2011, p. 32).

The sub-zone 6-1 will be transformed to a western ring road of the area in order to give access to the underground parking areas under the shrine and other religious facilities of Shah Cheragh and Bein-ol-Haramein project.

Area 6-2 with more than 6.000 m2 residential units including historical houses such as Manteghi-Nejad house will be transformed to accommodation facilities and guesthouses for pilgrims and tourists.

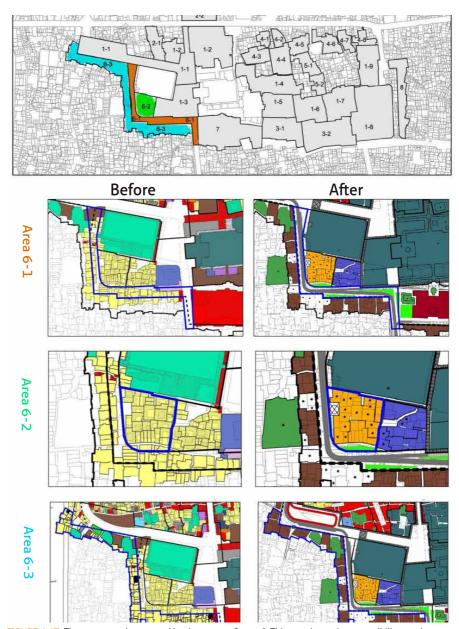


FIGURE 4.47 The current and suggested land use map of zone 6. This zone is proving accessibility to other parts of the city, therefore a new ring road on the southwest side of the area will be constructed. Source: (Bavand 2011, pp. 75-77)

Private educational facilities and galleries will be developed in zone 6-3 in order to encourage private investors to finance the project. There is a well-known Khanqah³⁷ behind this area which will be extended to the main road and will house cultural and religious activities. In figure 4.49, a cross section of zone 6 is drawn in order to give a better understanding of the relation between the new redevelopments and street layout in the area.



FIGURE 4.48 A cross section of zone 6 illustrates the reuse of historical monuments into cultural facilities. The design provides openings along the ring road of the neighbourhood to make a safe space for pedestrians and encourage them to use streets on foot.

Source: (Bayand 2011, p. 78)



FIGURE 4.49 The situation in zone 6 before starting the project. Bad quality of passageways and accessibility network is very obvious in this pictures. Besides, the passageways need facade improvement as well as layout redevelopment. Photos by author

Zone Seven & Eight: Zone seven with the area of more than 32.000 m2 is dedicated to the improvement and completion of Bein-ol-Haramein project and providing parking facilities for the whole project. The main function of this zone is commercial and offices according to the original plan of Bein-ol-Haramein project. This part of the project is

A khanqah also known as a ribat is a building designed specifically for gatherings of a Sufi brotherhood or tariqa and is a place for spiritual retreat and character reformation.

financed by regional and city funds and is titled as intensive intervention with priority in the report.

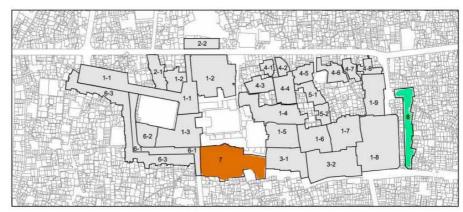




FIGURE 4.50 The current and suggested land use map of zones 7 and 8. Zone 7 is related to Bein-ol-Haramein project which has been executed incompletely. Zone 8 is located in the other side of the area and it will provide accessibility to Astaneh shrine from the east and attracts visitors to the pilgrimage axis and as a result to the whole neighbourhood.

Source: (Bavand 2011, pp. 79-81)







FIGURE 4.51 These pictures are taken from the situation of zone 7 before rehabilitation project..









FIGURE 4.52 The pictures above are taken from zone 8 and show the condition of residential units and main ring road of the area in the east side

Zone eight is located on the eastern border of the district and is planned to make the shrines more accessible from the east. After making a space for a secondary street, the rest of residential units will be transformed to commercial activities and offices adjacent to the street. This part of the project with more than 13.000 m2 is financed by private investments and is not mentioned as a priority intervention in the project report.

In the picture below major suggested land-uses are illustrated. As can be seen a large part of the block is dedicated to expansion of two shrines of the area: Astaneh and Shah Cheragh Shrine. Even though these developed areas are including cultural and commercial activities, they are not designed for residents and the main focus of the design is pilgrimage facilities and attracting more pilgrims to the neighbourhood.

The other important goal of this project is to provide automobile routes for visitors and residents with sufficient underground parking to make this area a major pilgrimage destination. In order to make the area more pedestrian friendly, a ring street around the block is developed to guide the cars to underground parking and limit their movement inside the neighbourhood. Most of the streets and pathways in the neighbourhood are car-free and are accessible by car only in emergency situations.

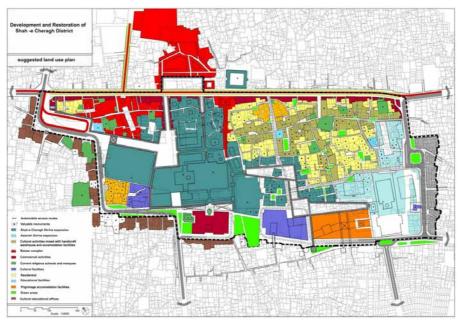


FIGURE 4.53 Suggested land use plan for Shah-e Cheragh area. Source: (Bavand 2010)

§ 4.3.6 Shah-e Cheragh Project Evaluation

The rehabilitation and development of the Shah-e Cheragh neighbourhood aimed to signify the shrines in the spatial structure of the historical city core of Shiraz. In doing so, the designers tried to integrate development with the historical structure of the area and connect residential areas with the shrine expansion by pedestrian passageways and vistas. However, the complexity of issues in the area and various involved agencies with different priorities make it very difficult to reach an agreement in the design process as well as execution process.

The main strategies in development and rehabilitation project of Shah-e Cheragh quarter can be summarised as follows:

- 1 Restructuring and developing the Shah-e Cheragh shrine to equip and transform it into a top pilgrimage destination in the country.
- 2 Providing required space for future expansion of the shrine complex by organising and improving surrounding area.
- 3 Solving congestion and traffic flow problems in the area and providing sufficient parking and public transport facilities for visitors as well as residents.

- 4 Organising the spatial structure of the unfinished Bein-ol-Haramein project in the southern part of the neighbourhood.
- 5 Integrating public and private participation in order to achieve a sustainable development plan
- 6 Restoration and renewal of historical buildings to house cultural and tourist services.

In order to analyse Shah-e Cheragh project, the evaluation quality framework which has been developed in the third chapter is being used.

Physical Quality:

Maintenance, re-use and repurpose of old buildings encourage neighbours to get involved in social activities on one hand and attract visitors from the whole city on the other hand. These conservation and rehabilitation projects as well as social involvement of residents in the activities can improve the quality of existing historical assets and facilitate the gradual revitalisation of the neighbourhood. One of the main approaches in this project is conservation of historical houses along the Persian cultural axis and transforming them to museums, galleries and handicraft warehouses as well as traditional restaurants and guest houses for the visitors and pilgrims. Defining axes and improving the composition of their façade encourage residents and visitors to walk around the neighbourhood and promote the connectivity of the area.

The same approach is also clear in the connecting axis between Persian Cultural axis and Pilgrimage axis. Apart from the conservation programs in this axis, particular attention is paid to the public space such as spatial arrangement of open public spaces and physical rehabilitation of facades and entrance portals. Unfortunately this part of the project is not among the priority zones of the project and will be executed in later phases and will be financed by private sector. The schemes and design of the public open area including considerations for suitable street furniture along these pathways are all mentioned in the project report, but starting the execution of the project with major destruction of urban fabric and building new wide streets around the area makes the neighbourhood an unattractive area for investment.

Apart from this axis, another main axis is also designed in this neighbourhood which is more considered for pilgrims and mainly consists of expansion and development plans around shrines. The design of these development plans are with respect to the scale and spatial structure of the neighbourhood and consist of open and semi open areas in order to connect the complex to other parts of the neighbourhood and encourage visitors to pass through the shrines complex, the same as mosque and other religious buildings in the past which acted as public passageways to make the neighbourhood more compact and accessible by foot. This project facilitates the accessibility of pilgrims to the shrines and makes the neighbourhood more compact and connected by

promoting pedestrian zones and bringing traffic underground. There are however some shortcomings regarding the connection of this area to other parts of the new city and encouraging residents of other areas to come to this area. The size of the urban grains in new developed areas are not integrated with the old fabric and lack a sense of unity.

A new street has been built on the western border of the neighbourhood (zone 6) to solve traffic problems and guide traffic flow to underground parking under Bein-ol-Haramein project. Even though the execution of this street has finished almost 18 months ago, open public spaces along the street have not been developed and their façades have not been improved. In this area, the residents are not willing to spend leisure time in local public spaces because of the high degree of disorder and crime. The lack of urban furniture, particularly insufficient street lighting, and low aesthetic quality of the walking environment accelerate this situation.

MAIN ATTRIBUTES	DEFINED IN FRAMEWORK OR/AND PROJECT
Enclosure of public space	both
Diversity of vistas and overlooks	both
Legibility of historical landmarks	both
Connectivity within and between localities	both
Quality of public space	both
Integration of old and new developments	framework
Visual integration and composition of facades	framework
Unity in variety	framework
Reusing historical buildings	project
Restoring historical passageways	project

TABLE 4.5 In the table above the main attributes in respect to physical quality are compared and categorised according to the proposed framework.

Socio-Cultural Quality:

This project did not follow the gradual rehabilitation strategy and started with major destruction in the area in order to facilitate traffic flow in the west of the neighbourhood. In addition the unfinished project of Bein-ol-Haramein, located on the southern border of the area, acts as an obstacle for residents to access southern urban blocks. This also led to numerous social problems for the area which encourage residents to leave the neighbourhood or not spend time in the public open spaces for safety issues. Providing underground parking and ring roads around the area resulted in destruction of urban fabric including a number of historical and valuable houses in the area. This not only led to opposition of cultural heritage activists and organisations but also makes the residents oppose the continuation of the project execution.

However, the area contains a number of magnificent places which act both at the city and national levels. Certainly the most prominent among these buildings are Shah-e Cheragh Shrine and historical mosques in the area such as Jam'e Mosque and New Mosque. These monuments are among the main tourist attractions of Shiraz and act as a religious centre at city level. Rehabilitation of these building, which is complemented by the development and expansion plan of shrine complex, can transform this area into a desirable place for both inhabitants and visitors. The main question is which group receives priority and how is the balance between needs of these two groups considered in this project? In this program the main focus is on expansion and development of religious facilities in the area in order to attract more pilgrims and provide a better service for them. Having a powerful agency involved in the project with their legal and financial autonomy has both advantages and disadvantages.

The project is financed by national budget and it can solve residential needs and improve the quality of their living as well as providing infrastructures and facilities for pilgrims and visitors. Developing required services and functions for residents and upgrading public open spaces could motivate the inhabitants to continue living in their homes and act as a great motivation to get others involved, but unfortunately in this project this was not the case. During the implementation process the priority and national budget was given to the areas related to pilgrimage industry and the residential areas and their daily needs have been planned to later phases of the project and will be financed by private sector.

By using different axes and connecting passageway the project is successful in defining public and private territories and residents and visitors can perceive the basic layout of the area easily. However, new developed areas and expansions lack sense of belonging for residents due to their vast area and non-human scales.

MAIN ATTRIBUTES	DEFINED IN FRAMEWORK OR/AND PROJECT
Hierarchy between public and private	both
Social engagement of residents	framework
Walkability and pedestrian convenience	framework
Cultural Significance	both
Human scale	framework
Perceivable basic layout	both
Sense of belonging	framework
Equality of various groups in accessing opportunities	framework
Accessibility	both

 $\begin{tabular}{ll} TABLE 4.6 In the table above the main attributes in respect to socio-cultural quality are compared and categorised according to the proposed framework. \\ \end{tabular}$

Functional Quality:

This project has a very innovative approach towards in its design phase and considers major pathways with various functions and services to connect and integrate the shrine complex with the whole neighbourhood. However, in the execution plan the project lacks flexibility and considers no practical factors regarding the changes and local potentials. The priority zones in the execution plan were mainly related to traffic congestion and car access to the area. The execution plan did not give any priority to gradual rehabilitation of existing residential units, marking them as private investment packages. Large scale interventions and focus on building wide access roads on the border of the neighbourhood resulted in huge destruction in the area, which in turn led to stopping the project a number of times because of public opposition. None of the pedestrian throughout pathways have been executed in the neighbourhood and even the pedestrian pathways next to newly constructed street has not been organised yet, making it an unpleasant place for residents or visitors to walk.

In the project report there is a specific emphasis on the three main passageways with pilgrimage and cultural activities and one connecting passageway with services and tourist facilities functions. Public spaces have been designed at the main intersections of these pathways and various activities have been defined for these public spaces such as gathering, chatting, playground for children as well as religious ceremonies and activities. However these public spaces can only function as a lively and active space if they can overcome their physical decay and their functional fragmentation by physical rearrangement and re-concentration of local functions. Unfortunately these zones have not been prioritised or defined as sub-projects with specified budget and a responsible agency.

The main problem in the area is local service facilities for the residents. The diversity of functions are high but they are mainly focused on the pilgrimage function of the neighbourhood. More than half the area of the neighbourhood is dedicated to religious buildings and expansion programs of the two shrines. Only in the northeast of the area a small part will remain residential which forms a very isolated community with huge monuments and buildings which are designed and work at city or even national level. However, improving the Persian axis will provide various alternative choices for the residents in case of recreation and service facilities and will promote social interaction between residents and visitors. In case of cultural facilities, this neighbourhood will not have any shortage. Some commercial facilities are also considered in the design but due their proximity to the shrines and Vakil Bazaar in the north of the area, they will either sell pilgrimage goods or will act as a tourist attraction with handicrafts and souvenirs. Local shops and everyday needs have not been provided in the area for residents. Even though this project tried to define a few major axis in the area and create various facilities along them to accommodate both visitors and residents, it cannot be described as successful regarding this criterion.

MAIN ATTRIBUTES	DEFINED IN FRAMEWORK OR/AND PROJECT
Mixed land use	framework
Balance of residential and public territories	framework
Local autonomy of the neighbourhoods	framework
Various alternative choices	both
Density of public space	both
Integrating heritage into design	both
Equality between tourists' and residents' needs	framework
Opportunity for social interaction	both
Multi-functional and multi layered	framework
Branding area with new activities	project
Redevelopment of key sites for tourist facilities	project

TABLE 4.7 In the table above the main attributes in respect to functional quality are compared and categorised in accordance with the proposed framework.

§ 4.4 Conclusion

Evaluating these two case studies in the assessment framework of this research resulted in a categorised evaluation of these projects which will help to find out about their shortcomings and advantages.

Regarding physical quality, the first case study (Sang-e Siah project) succeeded in arranging open areas and public places along the main axis of the district. The main axis of the district has been selected as the main zone of interventions and various clusters of buildings and open spaces have been rearranged and organised along it. The serial vision theory of Cullen or how people engage with the built environment as a moving object has been developed and highlighted in this project (Cullen 1961). In this project, the design of open areas and spaces contribute to creating lively and beautiful places for people (residents and visitors) to enjoy. Lynch's sensuous quality or legibility is also considered in this design by respecting the historical context of the districts and paying attention to the history of the main pathway of the area and cluster of monuments and buildings along it (Lynch 1981). Paying attention to vistas and perspectives, street furniture and density of public place are considered in the design and execution of this project. In the second case study (Shah-e Cheragh project), the major attention has been dedicated to the development of the shrine complex and providing facilities for the pilgrims. The shrine and its connection with the other monuments in the neighbourhood define the identity of this quarter and reorganising the spatial structure of the neighbourhood will improve the sense of place in the

neighbourhood and its residents. Historical houses along the Persian cultural axis were considered as an asset for transforming the residential area and its physical decay issues. The conservation and reuse of historical building along the Persian cultural axis can also encourage both residents and visitors to take part in the cultural and religious activities of the area. These houses will provide cultural activities as well as traditional restaurants and guest houses for visitors. The project has considered the vistas and overlooks towards historical monuments and tried to use significant signs of the past in its design. Reorganising public gathering space or using a landmark of the past, even a tree, will lead to a more legible and authentic space and increases the sense of place for both residents and visitors. Organising open public space and improving facades and portals were also considered in the project. Unfortunately this part of the project has not been defined as a priority zone of intervention and is going to be executed in later phases of the project by private investments. On the other hand, there is a huge negligence towards local public spaces in this project even in the executed phases (zone 6). Providing sufficient parking facilities and making pedestrian routes around the area is a positive point in this design. Arranging public activities and buildings around open areas and creating good perspectives and overlooks are also highlighted in Bacon and Sitte's theories and writings (Collins 1965, Bacon 1967).

In the second criterion, socio-cultural quality, Sang e Siah project has paid attention to the pedestrian user and walkability of the neighbourhood. The main axis of the neighbourhood has been designed car free for most of its length with sufficient urban furniture for sitting and enjoying the public places. Creating a better physical framework makes outdoor activities grow in number, duration and scope (Gehl 2011). Arranging cultural and other public activities within main clusters of the area encourages both residents and visitors to participate in urban activities and have access to joy and opportunities. Pedestrian convenience and an affordable and clean neighbourhood produce sense of belonging to a community which results in participation of residents in the decision making process for their neighbourhood. In Shah-e Cheragh case study pedestrian pathways have been defined and equipped with urban furniture and green vegetation in order to provide proper and convenient places for residents. As Brambilla and Longo mention, making inner cities more pedestrian-friendly will improve traffic management, economic revitalisation and environmental quality (Brambilla and Longo 1977). This will encourage the residents to take part in social and cultural activities and spend more time in the neighbourhood open spaces. However, none of these pedestrian pathways have been executed so far and the priority zones focus on development of the religious complex and providing car access for pilgrims or visitors. In the design report, there are many schemes about how lively and full of pedestrians the area is going to be later, but in reality this aspect has been neglected and is only considered as the last phase.

The last criterion, functional quality, has the main focus on the liveliness of the neighbourhood and how this project contributed to the density and quality of urban

activities in the area. In the first case study, arranging buildings around main open spaces and improving the visual quality of the public places can contribute to the existence and quality of activities in the neighbourhood. Also, reuse and renovation of historical houses and the local bazaar in the area played an important role in encouraging residents to stay in the public areas for longer duration. Mix of land use and compactness of the area supports the vitality of the area and encourages people to participate in urban life of the neighbourhood. Increasing the number of "eyes on the street" gives more safety and sense of security to the area (Jacobs 1961). In the second case study, some major pedestrian axes have been defined in the area to make it more walkable and connected. Commercial spaces have been defined in the area but due to their proximity to the shrine and other touristic attractions, they do not act as local shops and do not provide everyday goods for the residents. The volume of development areas and their city level function make residential units more isolated and even though there a mix of uses in the design, in reality the passageways are not active and full of activities. The project tries to connect this area with other parts of the city by improving public transport facilities and providing sufficient underground parking and a southern ring road. This part of the project has not been executed in a sensible way and resulted in destruction of historical houses in the area. This does not give any motivation for residents and heritage activists to participate in the project and improve the connectivity of the area.

Concluding, Sang-e Siah Project is notable for supporting and motivating a gradual process of the historical core revitalisation through investing on infrastructure and upgrading public space which can be seen as a catalyst for encouraging the residents. Improving the living condition of residents was considered from the first phases of the project.

Although the project was conservation based, it addressed a variety of factors in the rehabilitation process such as adaptive re-use of historical buildings and securing their maintenance, redevelopment of significant sites for public facilities, upgrading infrastructure and the quality of public space in the area, developing the existing business and promoting new jobs opportunities and enhancing the Sang-e Siah quarter as a centre for tourism.

Shah-e Cheragh project is mainly focused on the development aspect of the shrine facilities and is executed in a very top down governance system. The strategic plan defines expansion projects for the Shah Cheragh shrine as priority zones of intervention due to the powerful autonomy of their religious institutes and their urgent need for providing new facilities for pilgrims. Shah-e Cheragh project is mainly financed by national budget and religious organisations. The adaptive re-use of historical buildings and securing their maintenance are mentioned in the project report, for example along the Persian cultural axis historical houses are restored and reused to provide cultural activities or traditional guestrooms and restaurants for visitors. The project does not

include local residents in the decision making, design and execution phase which has led to dissatisfaction of the residents about the project and its destructions.

Even though these attributes are varied in influence and weight, below digrams show their evaluation is more graphic way. from the diagram below, you can see that Sang-e Siah project has executed and developed a larger of number of attributes from the framework while the second case study is missing half of the attributes that are mentioned in the suggested framework.

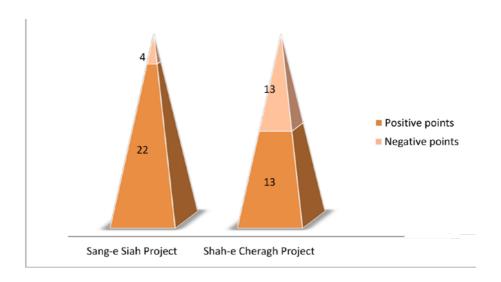


FIGURE 4.54 The ratio of positive and negatibve points in two case studies are compared in a very schematic way. The weight and importance of the attributes and quality parameters are considered the same to simplify the comparison in a schematic way.

In the table below, the attributes have been divided into three major groups. The attribtes that have been used in the project and are also a part of the suggested framework have been mentioned as positive points. The second category is entitled to the attributes from the framework which are missing in the projects.

The third category are the creative attributes and solutions that have been used in the projects and are not mentioned in the framework. These attributes are not extracted from the historical analysis of the htraditional iranian urban forms, however, they can be considered in the improvement and development of a future guidelines and frameworks

	SANG-E SIAH PROJECT	SHAH-E CHERAGH PROJECT
Positive points	Quality of public space Connectivity within and between localities Enclosure of public space Legibility of historical landmarks Visual integration and composition of façade Integration of old and new development Hierarchy between public and private Walkability and pedestrian convenience Human scale Social engagement of residents Perceivable basic layout Sense of belonging Cultural significance Equality of various groups in accessing opportunities Mixed land use Balance of public and private territory Local autonomy of the neighbourhood Various alternative choices Integrating heritage into design Density of public space Equality between tourist and residents' needs Opportunity for social interaction	Quality of public space Connectivity within and between localities Enclosure of public space Legibility of historical landmarks Diversity of vistas and overlooks Improving accessibility Hierarchy between public and private Perceivable basic layout Cultural significance Integrating heritage into design Density of public space Various alternative choices Opportunity for social interaction
Negative points	Unity in variety Diversity vistas and overlooks Accessibility Multifunctional and multi-layered structure	Visual integration and composition of façade Unity in variety Integration of old and new developments Walkability and pedestrian convenience Sense of belonging Social engagement of residents Equality of various groups in accessing opportunities Human scale Balance of public and private territory Equality between tourist and residents' needs Mixed land use Local autonomy of the neighbourhood Multifunctional and multi-layered structure
Creative points	Reusing historical buildings Restoring historical passageways Gradual intervention and avoiding large scale interventions Branding area with new activities Redevelopment of key sites for public facilities Developing neighbourhood activities	Reusing historical buildings Restoring historical passageways Branding area with new activities Redevelopment of key sites for tourist facilities

TABLE 4.8 Overview of the evaluation of the projects according to the framework and list of the quality attributes and creative solutions used in these two case studies.

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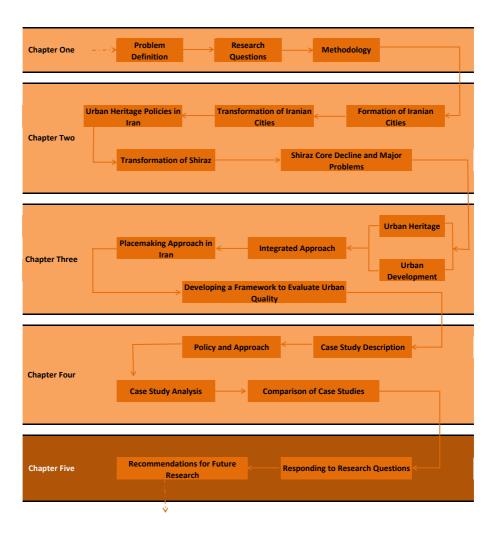
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5 Conclusion



§ 5.1 Introduction

The main aim of this research was to develop specific parameters and evaluation criteria derived from and therefore suitable for Iranian conditions in order to help urban designers in reaching a balance between urban transformation and heritage preservation. The material the research produced is assembled to form an urban quality framework. The historical urban core is chosen as a testing ground for this research because a considerable number of historical architectural artefacts and structures are located within it and because, due to its central location inside the modern city and its functions, it is the subject of great change and urban development programs. Iranian cities in general and the inner city of Shiraz more specifically have been chosen as a case study. The developed conceptual framework is applied in the analysis of two cases, each representing a particular approach employed by the urban authorities during the last decade. The cases are two adjacent parts of the historical core of Shiraz: the Sang-e Siah project, which represents a multi-agency, locally-based, conservation-led approach and Shah-e Cheragh project with a centralised, state-led, redevelopment oriented approach. The study explored the driving forces behind these interventions, the main features of these projects and their outcomes as well as their social and spatial impacts.

This final chapter extracts a few conclusions from the analysis of the case studies which are considered as the major contribution of this thesis to both knowledge and practice debates on city centre regeneration and development policies. It links the theoretical arguments raised in chapter two with the empirical outcome provided by the case studies in chapters three and four in order to answer the research questions raised in chapter one. This final chapter, therefore, is divided into three main sections. The first section gives a brief overview of the research questions while the second section summarises the key findings of this research. This chapter ends with suggestions for further research.

§ 5.2 Responding to Research Questions

This section gives detailed answers to the three main questions of this dissertation posed in chapter one.

Question 1: What are the characteristics of urban heritage and its preservation in Iran?

"Iranian historical urban cores are valuable parts of urban areas due to the cultural heritage that they house, but also due to their urban pattern and their valuable urban ensembles and urban activities" (Kermani and Luiten, 2010). The structure of Iranian cities are defined and shaped around their bazaar as the main backbone of the city. The bazaar is a place for the economic, social, political, cultural, and civic activities of people (Moosavi, 2005) while providing bridges between the middle and lower classes of Iranian society (Mazaheri, 2006). The bazaar as the main economic and social centre of the city is located close to the main Friday Mosque and other public facilities. It is surrounded by residential quarters (mahallas) housing various social, ethnic or religious groups. Each neighbourhood has a small neighbourhood centre consisting of a shopping area to meet daily needs and a mosque and other cultural facilities for the inhabitants.

What makes Iranian urban cores significant is not merely their valuable historical monuments and authentic patterns. The pressure of development and growth of urbanisation in Iranian cities is another major factor. Before the twentieth century most public facilities in Iranian cities were developed and maintained by the private sector and charities based on Islamic rules or Sharia (Marefat, 1997 and Madanipour, 1998). However, after the re-establishment of a centralised state at the beginning of the twentieth century by Reza Shah, the government invested in the planning and transformation of the cities following western patterns (Madanipour, 2003).

Due to the oil-based economy and financial independence of the state, the government gained more autonomy in the development and expansion of cities as well as in renewal programs inside the old city (Keddie 1981, Dehesh 1994, Madanipour 2006). On the other hand, urban sprawl intensified the problems of the historical centres as the old city core became a minor part of the whole sprawling city and lost its social and economic importance.

Currently two major institutes are responsible for conservation and rehabilitation of historical urban cores: Iranian Cultural Heritage Organisation and Urban Development and Revitalisation Organisation. At the same time, the government established new organisations in a parallel role with the existing ministries such as the Martyrs' Foundation and Housing Foundation, which led to an inefficient bureaucratic system. Religious institutes and shrines also play an important role in this process.

As mentioned and illustrated in chapter three, during the last fifty years Iran has had various experiences in different scales and subjects of urban design in the context of historical parts, ranging from large scale urban development and urban renewal projects, to urban regeneration and rehabilitation programs. The valuable historical urban structure of Iranian cities on the one hand and the powerful development pressure on historical cities in the last century on the other makes Iran a very interesting field to study spatial interventions in a heritage context.

Question 2: What are the parameters to form a quality framework that can help us to evaluate the urban interventions in the Iranian urban historical environment?

In order to reach an urban quality framework for evaluating urban interventions in an Iranian heritage context, influential studies and scholars' ideas have been reviewed in both traditions of urban design, such as Sitte and Cullen from the visual artistic school and Lynch, Jacobs and others from the social usage school. The Placemaking approach has been chosen as an integrating tool between urban development and conservation in a heritage context. Both visual and physical qualities of the urban environment as well as its social life qualities are considered in this approach.

To transfer placemaking ideas to the Iranian context, the urban type of the bazaar has been selected as a unique example of how urban space influences aesthetic and behavioural aspects. Three main qualitative dimensions of urban development (physical, socio-cultural and functional quality) can be traced in the bazaar and its relation with residential areas and the whole city. After investigating the main urban design principles of Iranian cities, extracted from the available literature and maps, the main attributes of traditional Iranian cities in relation to these three criteria have been defined and a quality framework has been developed. These attributes have been derived from traditional urban forms in Iranian cities and have been considered as a determining factor in the quality of urban form. However, some of them can also be found in other international studies such as Lynch, Jacobs and others.

These case studies act as a testing ground to improve and evaluate the framework. This framework can be a significant tool in the planning and design phase and give more insight into the balance between environmental, financial and social costs and benefits during the execution and implementation process.

Question 3: What are recent design approaches in historical city cores in Iran and what can be learned from them?

Historically due to centralisation of power in Iran and lack of locally based agencies in development programs, urban interventions in historical city cores were initiated by government or religious organisations and were financed with national money. Urban development programs around the main shrine of Shah-e Cheragh is a good example of this type of intervention.

Large-scale physical interventions are still the dominant approach in dealing with historical cities in Iran, however, during the last two decades, following the political victory of reformists in the presidential election in 1997, there has been a shift towards integrated and decentralised policies. This has initiated a number of locally based projects in major Iranian cities such as the Sang-e Siah project in Shiraz.

However, due to the numerous agencies involved in historical cities and also parallel responsible organisations, the process of interventions in historical cores does not have any specific agenda. Both nationally financed and large-scale interventions as well as locally initiated projects are being designed for and executed in historical city cores.

To have a better understanding of the recent urban interventions in the Iranian heritage context and to be able to determine to what extent urban conservation and development have been considered in these projects, the two case studies have been evaluated according to the urban quality framework which has been inspired by traditional Iranian urban forms. These case studies serve as a testing ground to improve and evaluate the framework. Those attributes from the framework which were missing in the projects have been defined and any new innovative solutions from the projects have been added to the framework to act as a guideline for other projects. This evaluation and the comparison with the impact of the projects on the inhabitants shows that most of the problems in the execution phase can be traced back to the design and planning phase. It makes it more obvious that there is a need to have a framework of important criteria and attributes which play a significant role in improving the quality of urban interventions in Iranian historical city cores.

URBAN QUALITY CRITERIA	PHYSICAL DOMAIN	SOCIO-CULTURAL DOMAIN	FUNCTIONAL DOMAIN
Main Quality Attributes	- Enclosure of public space - Diversity of vistas and overlooks - Integration of old and new developments - Visual integration and com- position of facades - Legibility of historical landmarks - Connectivity within and between localities - Quality of public space - Unity in diversity - Reusing historical buildings - Restoring historical passa- geways	- Hierarchy between public and private - Social engagement of residents - Walkability and pedestrian convenience - Cultural Significance - Human scale - Accessibility - Perceivable basic layout - Sense of belonging - Equality of various groups in accessing opportunities - Gradual intervention and Avoiding large scale interventions - Improving the quality of residents' life	- Mixed land use - Balance of residential and public territories - Local autonomy of the neighbourhoods - Integrating heritage into design - Density of public space - Multi-functional and multi layered - Equality between tourists' and residents' needs - Opportunity for social interaction - Various alternative choices - Branding area with new activities - Redevelopment of key sites for public facilities - Developing neighbourhood activities

TABLE 5.1 Modified version of the framework after testing the quality parameters and attributes with the evaluation of the two case studies.

§ 5.3 Conclusion

This dissertation offers an evaluative framework for urban interventions in the Iranian heritage context. There has not yet been any framework developed for qualitative analysis and evaluation of projects undertaken in Iran. Even though there has been a lot of literature published on the history and significance of Iranian cities, there has not been any analytical study on their urban characteristics and qualities. Therefore, it was necessary to look for inspiration in international literature and at the same time study the traditional urban forms in Iran to extract the quality attributes for the framework. Two case studies with similar heritage specifications yet completely different approaches have been selected to test the framework.

This framework helps to comment on the quality of urban interventions in historical city cores; however, it revealed that some aspects of the three main domains of the framework are more operational and vital in reaching a successful urban intervention. In the physical domain, the importance of urban heritage and its distinctive character should be considered from the first steps of the project. To have an integrated design in a heritage context, connectivity and accessibility to the modern neighbourhoods play an important role in reviving the vitality of the area. Providing open spaces with a relation to heritage landmarks, considering vistas and overviews of those who pass by and enclosing the public areas to define the public territory are attributes that have been neglected in the new developments. The socio-cultural quality of the area considers more than providing cultural activities in the transformed historical monuments. The liveability of the area depends on many factors such as social interaction and access to opportunities for all users. In the Iranian context the bazaar is mentioned as the most socio-cultural area of cities due to the opportunities that it offers to engage inhabitants in social activities. The last criterion, the functional quality, is missing in Iranian planning and design practice or is limited to a suggested zoning map of the area. However, the activities and functions should be planned and designed from the beginning. The scale and type of activities should on the one hand support the economy of the neighbourhood to flourish and on the other attract inhabitants to live in the neighbourhood and participate in these activities. In this way the neighbourhood will be safer due to the presence of users and self-reliant in meeting the daily needs of the residents. Treating the needs of residents with the same importance as facilities for tourists is key in encouraging residents to engage and participate in the implementation of the project.

However, this dissertation is the first step in this process and the validity and importance of the outcome should be tested on more case studies to reach a relevant and operational tool for urban design professionals and project practice in Iran. This dissertation is also communicating the Iranian urban experiences of and policies on heritage context to an international audience and on the other hand delivering and introducing relevant international literature and guidelines to the Iranian professional community.

§ 5.4 Recommendations for Future Research

In order to reach a framework to evaluate heritage related interventions in Iranian historical urban cores, we need to know at least two other dimensions. Therefore, this dissertation suggests the following topics for future research projects:

- Administrative and management systems of the historical environment as well
 economic factors and financing systems for urban interventions play an important role
 in the implementation and completion of a project. In order to enrich Iranian practice,
 it is essential to formulate these two aspects to the quality framework. This can help
 to reach a more practical framework which can be used in the administrative and
 economic conditions of Iranian urban planning.
- 2. The major challenge for development programmes in heritage contexts is to reach a local democracy in which the citizens can take a more active role in different aspects of their own environment. The picture will be more complete if people can be involved in the decision-making and design process of urban interventions as well as evaluating the completed urban interventions. A deep study on public evaluation of city centre regeneration programmes will help to improve the evaluation quality framework and expand it to design guidelines.

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Curriculum vitae

Azadeh Arjomand Kermani was born in Kerman, Iran on February 11th 1979. In 1997 she completed her high school education at National organisation for development of Exceptional Talents (NODET) in Kerman with distinction, majoring in Mathematics and Physics. In 1997 Azadeh continued her education in Architecture at Art University of Tehran. The program consists of six years of theoretical courses and studios on various topics, ranging from architecture and interior design to industrial construction, urban design and heritage conservation and restoration. Aside from her education, she participated in various projects in the Cultural heritage Organisation in Isfahan and a collaborative workshop between University of Westminster and Art University of Tehran on rehabilitation of old fabrics of Isfahan.

In 2005 she received her master degree after completing her graduation project on Rehabilitation and Restoration of old fabric of Kerman. Her graduation project was selected and published as one of the most successful and realistic academic projects of Iran in 2006. She worked for five years in both academic and practice environment: Lecturer and professor assistant at University of Kerman as well as Junior researcher and designer at Fara Design Consultant Office participating in urban design studies in revitalisation and renewal projects of the cities of Kerman and Bam. After working as a researcher for 8 months at Siegen university in Germany, she was appointed as PhD candidate at Cultural History and Spatial Design chair at Urbanism department in 2009. Azadeh has also been working on other heritage related projects and writing grant proposals since then, among them are SHUC and PICH projects under JPI program. Since 2016, she is working as a researcher at Urbanism department, TUDelft.

List of publications

Journal papers

A. Arjomand Kermani, N. Charbgoo & M. Alalhesabi, 2016. "Developing a Model for the Relation between Heritage and Place Identity". International Journal of Civil, Environmental, Structural, Construction and Architectural Engineering, Vol. 10, No. 3

A. Arjomand Kermani, 2015. "City Profile: Shiraz-Iran". Cities, the International Journal of Urban Policy and Planning, submitted

A. Arjomand Kermani & E.A.J. Luiten, 2010. "Preservation and Transformation of Historic Urban Cores in Iran. The Case of Kerman", Environment and Development Journal, ISSN: 1790-5079

Conference proceedings/oral presentations

A. Arjomand Kermani, 2013. "Revitalising Traditional Patterns in Iranian Historic City Cores: Shiraz", 16th Annual US/ICOMOS International Symposium, Savannah, USA.

A. Arjomand Kermani, 2012. "Modernisation Policies in Iranian Historic City Cores", International conference of urban change in Iran, University College London, UK.

A. Arjomand Kermani, E.A.]. Luiten, "Revitalising Strategies in Iranian Historical City Cores, Case of Shiraz", 26th Annual Congress of the Association of European Schools of Planning (AESOP), Ankara, Turkey.

A. Arjomand Kermani, E.A.]. Luiten, 2009. "The Impact of Modernisation on historic Iranian cities", 9th WSEAS International Conference on Urban Rehabilitation and Sustainability, Baltimore, USA.

A. Arjomand Kermani, E.A.J. Luiten, 2009. "Revitalisation of Iranian historic city cores, Case of Kerman", International Symposium on 'Revitalising Built Environments: Requalifying Old Places for New Uses', Istanbul, Turkey.

A. Arjomand Kermani, E.A.]. Luiten, 2009. "Sustainable urban planning in Iran", Second International Conference on Whole Life Urban Sustainability and its Assessment, Loughborough, UK.