

THE EFFECT OF MODERN IRANIAN FAMILY CULTURE TOWARDS HIGH-DENSITY VERTICAL DEVELOPMENT HOUSING DESIGN

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To my beloved father, wife, and Mehrta

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ABSTRAK

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Abstrak adalah ringkasan singkat dari isi utama suatu karya tulis ilmiah. Tujuan dari abstrak adalah untuk memberikan gambaran umum tentang penelitian yang dilakukan, sehingga pembaca dapat mengetahui apakah karya tersebut relevan dengan minatnya. Abstrak biasanya mencakup informasi tentang latar belakang, tujuan, metode, hasil, dan kesimpulan. Dalam penulisan abstrak, penting untuk menggunakan bahasa yang jelas, padat, dan lugas. Hindari penggunaan kalimat yang berbelit-belit atau terlalu teknis. Pastikan bahwa abstrak mencerminkan isi sebenarnya dari karya tersebut, tanpa menambahkan informasi yang tidak ada. Selain itu, perhatikan juga format penulisan abstrak yang berlaku di jurnal atau konferensi yang dituju. Dengan mengikuti panduan tersebut, diharapkan abstrak yang dihasilkan dapat memberikan gambaran yang akurat dan menarik tentang karya ilmiah yang bersangkutan.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

Human life is a cultural life which is linked to the world of values and meanings. Cultural system is a system of value and meaning that creates a personal behavioural system and it comes from the placement of behavioural system of people inside institutions and social structures of collective behavioural systems which, ultimately, separate and distinguish societies from one another. Culture offers a person both sensual and emotional systems, that is the system of unconscious value and meaning, which reflects ethical and theoretical principles and supposedly personal and collective worldview.

In sociology, “lifestyle” has been considered as a set of *shared values and daily life and, therefore, behaviours have meaning in a certain social context. Activities such as the type and extent of people’s social relationships usage of space, time, and type of kinship and family relationships and so on, are different in various sociocultural areas (Mahdavi Kani, 2007). But in terms of residence, culture means the manner people choose for the way they behave or perform an activity (Rapoport, 1980). In other words, lifestyle is a compact statement which includes all human behaviours towards oneself, family, and society. Eating, dressing, speaking, moving and visual behaviours have a tangible or intangible reflection on the formation of the*

surrounding space. Housing, neighborhood, and city are the spatial products of a person, family, and society's culture. In this regard, it can be said that the most effect of this factor on the form of housing can be sought in how houses are spatially organised; in other words, culture includes the interactions of a person, group and society with space (Haeri, 2009).

From the perspective of anthropologists, life or residence style is a set of values and meanings which determines what housing for a group or nation means. It also includes how to build a house, what chores and activities to do or ban in it, what relationships to establish between a house and other aspects of social life, which rituals to perform inside a house and which outside, etc. These are all the subjects that are responses to the life or residence style of each society which is indeed a subset of the totality of the culture of a society (Fazeli, 2006). Therefore, in behavioural states there is a special semantic dimension which depends on the culture of users and the way they use them affect their location, proximity, and extension of the whole system. Scholars seeks to show what people do where, when, why, and with whom. The diversity of activities, create the many states which are formed based on cultural needs. It means that "meaning" in built environment is not something that is added to function, but "meaning" is the main factor to which the environment should respond.

Hence, qualitative needs are mostly more important than quantitative needs and for this reason in most cases users act differently in making their choices, because qualitative needs play the main role in their evaluation and expectations (Pourdeihimi, 2011). Therefore, semantic dimension has an important role in creating various spaces. That is in some spaces with similar method of usage, the rules and standards are usually different due to the difference in the cultures of the users. It means that people and their behaviours are the parts of the system of the residential units, in such a way that behaviour and environment cannot be separated from each other. Human behaviours are formed in the context of the environment and the behavioural conditions cannot be analyzed and evaluated without considering the influence of the environment (Mozafar et al., 2012). Therefore, design should be accomplished by taking advantage of knowledge of how humans interact with their

environment. Because the characteristics of residential environments depend on the characteristics of the activities within them, which in turn, determine the relationships between their culture and environment (Altman et al., 1992). That is, family culture and the way activities are performed in residential units are very important. Therefore, reanalysis of culture seems essential in designing build environment.

In this regard, this research studies the relationship between family life and housing. To reach this purpose, this study focuses on middle-class Iranian family routine activities and occasional rituals in the internal spaces of housing units of high density vertical development housing located in the new town of Parand, Iran. The reason of this choice is that the Iranian middle-class families are the majority of Iranian population. Based on Iran Ministry of Cooperative, Labour and Social Welfare (2014), 58% of Iranians are middle-class. However, the population of upper middle-class Iranian families is 11 % and high-income families just are 6% of the Iranian society. The official statistics of Iran Ministry of Cooperative, Labour and Social Welfare (2014) shows that low-income Iranian families are 15 % and lower low-income part is only 10% of the Iranian population. The reason of this type of population distribution in different social classes is the monthly government financial supports to all Iranians that caused the decrease of the low-income population and the increased number of the middle-income Iranians. In this regard, this study scoped down by focusing on middle-class Iranian families as representing the majority of the Iranian population. In this regard, through identifying and generalizing the Iranian middle-class families' culture, the existing problems of the selected housing units in terms of quality of house involving human and spatial aspects are described. Therefore by referring to the findings, some recommendations to help designers improving the spatial organisation of future Iranian middle class housing are formulated.

1.2 Research Background

Lifestyle is based on the way people use available sources and this is because lifestyle is a form of status groupings (Chaney, 1996). It means that in the concept of lifestyle, type of activities that are performed, the reasons for them, and the meanings that they imply are taken into considerations. Therefore, lifestyle determines different methods of using materials, places, and the time they take. In other words, it determines how spaces are used in daily life. The meaning of lifestyle especially leads to the selection of life properties, activities, and the way they are performed which is related to lifestyle in environments. Lifestyle is a concept that is formed and created in built environments, based on values, ideas, assumptions, and schemata.

From an anthropological view, lifestyle that is related to residence is a set of values and meanings which determine what a housing mean in a group or nation. How we should build houses, what activities we should perform in them, what rituals we should carry out, etc. are all the issues that are answered by the life and residence style of each society and are defined as a subset of the totality of culture of a society (Fazeli, 2006). Therefore, it can be noted that the purpose of culture in lifestyle is providing conditions for life that are proposed through the necessary legitimacies for the way they are formed. Therefore in the combination of different aspects of culture with each other, it is evident that the main emphasis is on people's lifestyle and their values. That is what people do where, when, why, and with whom.

Based on what was mentioned, if the housing is a body based on a mental schema, it can be concluded that understanding housing is basically possible through understanding different layers of cultural effects of each area (Baydar, 2004). In this method, some parts of the environment have a close relationship with components of culture such as values, assumptions, norms, lifestyle, and activity systems. Therefore, it can be said that the main issue in the area of culture and environment is emphasizing the physical aspects of space as what determine human activities and interpersonal, intragroup, and social relationships. Because human and environment improve and define each other dynamically and in the form of a whole unite

(Memarian, 1993). This is the same as environmental possibilism which considers environment the provider of human behaviours. It believes that environment includes a set of behavioural opportunities based on which desired activities of human occur in an environment in the framework of culture i.e. values, convictions, and beliefs. Therefore, in this way it is possible to answer to higher needs of humans, considering the cultural formation of a family in housing.

Given that architecture is the context of life and life means the manner of living and human relationships, which is a result from the culture of a society, architecture has an identity that expresses the values dominating a society and also shows the factors of cultural identity that create it (Omer, 2010). It means that housing features depend on the activities within it, that lifestyle and the way activities are performed in a residential environment are very important. In fact, special values that exist in lifestyle, determine the priority of the subjects (Hojjat et al., 2012). These subjects are a range of qualities which exist between two extremes (Moarefi et al., 2011; Mozafar et al., 2012). The qualitative criteria of family culture and how they are used in housing design affects some ideals and leads to the possibility of the formation of a proper space. These factors lead to a certain manner of thinking about the quality of space through expectations and choices. Consequently, the quality of a residential environment is in a relationship with the culture of its residents including their values, social class, and etc. (Lefebvre, 1991).

According to Dursun and Saglamer (2009) the factors determining the quality of housing can be evaluated in terms of spatial, context and background, humanistic, and economic aspects. Spatial aspect consists of housing architecture, location, size and dimensions, and also spatial organizers. Context and background aspect includes natural properties of the residential area and the related city distances, and human aspect includes cases such as residents, cultural values, and their higher needs. Economic aspect also consists of the possibility of shopping in an area. Based on what was said and also based on the approach and scope of this study, the quality of the interiors of a house is taken into consideration in terms of human aspects which includes the parameters of privacy and territory, and spatial aspects including the flexibility parameter, in terms of adaptability and variability.

The investigation of the architecture of Iranian traditional housing revealed that these buildings are less the result of personal desires and more the illustration of purposes and desires of groups for an ideal environment. This is because the factors forming space and combinations in these residential environments are the dreams of humans of an ideal life and also what fulfills cultural and social needs of extended families living in them. But the process of modernism created a new set of relationships within houses. It means that the meaning of family changed with a change in the role of children (Aries, 1973). This is because in the extended families in pre-modern era, the relationships between parents and children were limited and the foundation of family was based on ethical and social principles rather than emotions (Muncie et al., 1995). After some fundamental changes had occurred in modern time, children became the center of attention which led to the formation of a stronger bond between them. After the emergence of this phenomenon in the modern world, housing changed from the center of social life into a context for improving people and nuclear families' private life. These functional changes cause the relationships among men and women and children to be affected to a great extent. On the other hand, the structure of Iranian families that consists of the quality and quantity of family, the relationships inside a family, value and cultural backgrounds, and so on, resisted some of the changes-brought about by universal modernism. It means that in the past, tradition had the power of a law in Iran that was respected by everyone. This respect was because of a consensus. Unlike the structure of modern Iranian families which have preserved their main structure due to preserving traditional values, Iranian modern housing has lost its conformity with the structure of the residents. Therefore, reanalysis of culture seems to be necessary in the design of the constructed residential environments in order to the fulfill higher needs of residents and their culture.

1.3 Problem Statement

Based on the Unitarian teachings and considerations of Islam, housing cannot be considered disconnected and separated from other phenomena and subjects related

to human life. This is exactly what is missing in modern time. Housing is a place for living and having comfort, not a static solid space but a very fluid dynamic one. The reflection of this Islamic principle can be clearly observed in Iranian traditional houses, as a direct manifestation of religious and cultural values and life style of residents in the form of concepts such as spatial flexibility, diversity, readability, and territory for preserving privacy of families. However, the main focus of the practitioners of modern mass housing is often on quantitative and especially economic factors.

In the past, many technological and cultural changes occurred in Iran and which affected different aspects of human life (Ibrahim Zadeh, 2010). These technologies facilitate the flow of life, they always brought change to the culture. Changes in culture in most cases damaged the culture and lifestyle of the new generation to a great extent due to its excessive difference from the Iranian traditional way of life (Azizi et al., 2007). These compulsory physical and conceptual changes caused many changes in the appearance and interior space of houses and changes in the physical geometry, in the importance and area of spaces, in the ignorance of how activities are performed and also inconsideration of family rituals. are of this kind (Bolukbashi, 2012). It means that the spatial model of Iranian modern housing is a model that, due to lack of arrangement and adjustment in copying western models and methods and lack of conformity to native and cultural background, caters only to biological needs (Pourdeihimi, 2011).

The issue of housing has been one of the important government plans in Iran in the last few decades (Bani Masoud, 2009). In this respect, living in high rise apartments has been considered as a solution to the problem of housing (Alavi Bolaghi, 2003). This choice that is considered as mere modeling of westerners (Abbaszadeh et al., 2009) caused the creation of new residence culture (Shieh et al., 2011). In this respect, this study seeks to describe the problems of these residential units in relation to the culture of the resident families and the quality of residential units in terms of human and spatial dimensions and the related parameters. This method is conducted by identifying the families' culture residing in the residential

units in the middle-class high density vertical development housing selected through identifying family daily routine activities and their occasional rituals.

1.4 Research Gap

As was mentioned in the statement of the problem, lack of attention to culture and lifestyle in designing Iranian modern middle-class high rise housing is considered as a serious issue. In this regard, discussing the issues of lifestyle, activities, values, religious, national, and familial rituals, seems very important and necessary in order to achieve a common pattern in the life of Iranian middle-class families in housing. In this way it will be possible to achieve methods a way of conforming housing and family and also a better relationship between these two. In order to achieve research findings in this area, the literature related to the area of housing in Iran was studied. In the process of these investigations, it was found that in the years 1979-1990, not many studies had been carried out in the area of housing in Iran because of the Islamic revolution of Iran, change in the system of government and temporary closure of universities and science centers for Islamisation and a sharp downturn in housing due to Iraq's eight-year war against Iran in the 1980'. For this reason, by focusing on the researches and scientific articles published in the years 1990-2012 it was found that the studies related to housing can be classified into two general categories which are the formation and physical investigations of Iranian traditional housing and Iranian modern housing. Therefore, considering the purpose of this study, the academic resources related to the Iranian modern housing in terms of the problem or concern, the parameter measured, and the methodology used were also studied. The results of these investigations reveal that the researches in the area of this study can be divided into five major categories. The first is related to researches in the area of housing quality from the human-culture aspect (e.g. Einifar, 2000; Kamran, Hosseini, & Zabihinia, 2009; Pourdeihimi, 2011) and analysis of parameters such as privacy, territory, ethnicity, and identity. Another category of these studies is in the area of physical and spatial qualities of modern housing (e.g. Ghasem Zadeh, 2010; Meddi et al., 2012; Shabani et al., 2010) and parameters such

as size, scale, nature connection and flexibility are studied. Another category is related to activities which viewed modernism in Iranian housing from a historical perspective (Baybordi et al., 2010; Diba, 1999; Golnia, 2012). These studies focus of modern trends in Iranian housing and also parameters such as satisfaction and identity. The last category of these studies is in the area of typology and form (e.g. Mirmoghtadaee, 2009; Okhovat, 1998; Saraaei, 2012) and parameters of aesthetics, climate and form are investigated.

As can be seen in the Table 1.1, there is a serious lack of knowledge in the area of the culture of families residing in Iranian high rise modern housing. This is because there has been no study yet focusing on identifying modern Iranian middle-class family common pattern of life involving their daily routine activities and occasional rituals in housing units. In this area Pourdeihimi (2011) has stated that due to the deep separation between modern housing and Iranian families, it is necessary to conduct more studies on families' culture and attempts to conform housing to these patterns.

The literature also show that there is no applied policy to prepare clear guidelines toward proper Iranian housing from the Iranian family culture and its' spatial requirements. Thus, the literature review shows that there is a serious gap in determining the relationship between the Iranian family culture and housing. In this regard, it is hoped that the findings of this study help designers to fill this gap through proper recommendations improving the spatial organisation of future Iranian middle-class high density vertical development housing.

Table 1.1: Studies on Iranian Housing from the aspect of Different Dimensions

Housing Quality from Human-cultural Aspect				
Authors	Problems or concerns	Parameter measured	Methodology	Strategy
(Ibrahim Zadeh, 2010)	Cultural problems	Identity	Survey Comparative analytic	Documentation Questionnaire
(Safa Bakhs, 1994)	Residence pattern	Modern Housing	Comparative analysis	Documentation
(Mozafar et al., 2012)	Iranian-Islamic pattern of housing	Privacy, introversion, hierarchy	survey	Questionnaire
(Ahad Nejad et al., 2012)	Cultural problems	Apartment residence	Descriptive-analytic	Documentation Questionnaire
(Einifar, 2003)	Territory in housing	Territory	Survey Comparative cases	Questionnaire Plan layout analysis
(Moarefi et al., 2011)	Interrelation between housing and culture	Furniture and activities	Historical	Documentation
(Mirshamsi et al., 2011)	Cultural effects on Bed room	Form	Phenomenological	Questionnaire
Housing Quality from Physical and Spatial Aspect				
Authors	Problems or concerns	Parameter measured	Methodology	Strategy
(Nejati, 2012)	Housing living quality	Physical convenience, size	comparative	Documentation
(Meddi et al., 2012)	Cultural ignoring in housing design	Scale, Nature connection	Mix-method strategy	Documentation Questionnaire
(Kamyar et al., 2012)	Social disorder	Size, location, crowding	Case study survey	Questionnaire
(Shabani et al., 2010)	Flexible design in compact housing	Flexibility, circulation	Comparative analysis	Documentation Observation
(Ghasem Zadeh, 2010)	Position of Rooms	Position and Size	Descriptive-analytic	Documentation Questionnaire
Historical Process				
Authors	Problems or concerns	Parameter measured	Methodology	Strategy
(Golnia, 2012)	Changing process of spatial organisation	Kitchen	Historical interpretive	Documentation
(Khojasteh Ghamari et al., 2012)	housing and culture	Privacy, Territory	Historical-comparative	Documentation
(Shiraz Pour, 2012)	Housing changing process	housing form	Historical	Documentation
(Alalhesabi et al., 2012)	Future housing	Identity	Historical descriptive	Documentation
(Baybordi et al., 2010)	Concepts of Housing	Legibility, flexibility, privacy	Historical comparative	Documentation
(Pour Mohammad et al., 2010)	Introversion ,social sustainability	Satisfaction	Historical interpretive	Documentation
(Diba, 1999)	Contemporary housing	Trends	Historical interpretive	Documentation
Typology and Form				
Authors	Problems or concerns	Parameter measured	Methodology	Strategy
(Karimi Moshaver et al., 2010)	Position of high-rise and urban landscape	Identity, aesthetic	Evaluative Comparative	Documentation Photograph Observation
(Mirmoghtadaee, 2009)	Housing transformation	Size and Plan layout	Comparative analysis	Documentation
(Okhovat, 1998)	Housing Pattern	Climate and form	Survey Comparative cases	Questionnaire Plan analysis
(Saraaei, 2012)	Iranian housing typology	Plan layout	Case study Descriptive	Documentation
Neighborhood and Social Issue				
Authors	Problems or concerns	Parameter measured	Methodology	Strategy
(Abdollahi, 2012)	Social capital of tall housing complexes	Neighborhood, social safety	Correlation	Questionnaire Interview
(Kamran et al., 2009)	Housing social problems	Ethnic, education, participate, social class	Survey theory testing	Documentation Questionnaire
(Poudeihimi e al., 2011)	Interrelation between housing and residents' identity	Identity, social interaction	Descriptive analytic	Observation interview
(Sajadi ghaem Maghami et al., 2010)	Housing social sustainability	Sustainability, safety, social interaction	Mix- method approaches	Documentation Questionnaire Interview
(Ajza Shokuhi et al., 2011)	Probabilistic Neural Network	Distance between house and work place, Leisure time	Mix- method approaches	Documentation Questionnaire Interview Observation
(Bahrami Samani et al., 2012)	Residents' interaction, Social sustainability	Open spaces, social interaction	Survey	Documentation Questionnaire
(Moarefi et al., 2010)	Public and private spaces and social interaction	Privacy, personal space	Descriptive analytic	Documentation
(Abbaszadeh et al., 2009)	Neighborhood connections	Social interaction	Survey	Questionnaire
(Khani et al., 2011)	High-rise internal neighbors	Crowding, privacy, Territory, personal space	Narrative	Documentation

1.5 *Research Aim*

This research aims at describing the relationship between interior spatial organisations of housing units in high density vertical development housing and modern Iranian middle-class family culture. In this regard, culture of middle-class families residing in the middle-class Iranian high density vertical development housing of Parand involving their routine daily activities and occasional rituals was be identified. By focusing and analysing the common pattern of selected families, the existing problems of housing spatial organisation in terms of human and spatial dimensions are described. Consequently, by referring to the findings, some recommendations that can help designers to improve the spatial organisation of future Iranian middle class housing are formulated.

1.6 *Research Objective*

To achieve the aim of the research, the following research objective is formulated:

To provide guidelines for the design of middle-class high-density vertical development housing that would be more conducive to the culture of middle-class Iranian families.

1.7 *Research Questions*

In order to achieve this objective, three questions need to be answered by this research:

1. *What are the common patterns of modern middle-class Iranian family daily routine?*
2. *What are the familial, religious, and national occasional rituals of modern middle-class Iranian family within housing?*
3. *What are the existing problems of the modern middle-class high-density vertical development housing from the aspect of modern Iranian middle-class family culture?*

1.8 *Research Underpinning*

Culture is a subject that has been studied from different aspects and views. This study, with an anthropological view towards the issue of culture, considers it a set consisting of three layers including imaginations, behaviour, and artifacts. Imaginations of worldview is the most inner layer and housing as a cultural phenomenon is the most outer later (Lawrence, 1983; Oliver, 1975; Rapoport, 1969). This study considers culture as an interaction between family and housing. Values, meanings, and activities play the role of the intermediate layers between beliefs that result from the worldview and housing as one of the external manifestations of culture.

The main issue in the area of culture and environment is emphasising the physical aspects of space as the supporter of human activities and human relationships (Altman et al., 1980). In this regard, according to Porteous (1977) there are four theoretical stances about the relationship between environment and behaviour as Free-will, Possibilism, Probabilistic, and Deterministic approaches. Based on act freely, in fact they are controlled by the environment. In other words, this approach by the environment is what forms human behaviour and considers the relationship between environment and behaviour to be causal (Lipman, 1974; Richards, 2012; Saegert, 1985). According to Lang (1987) the best explanation of believing in determinism of architecture is achieved by explaining how environment

determines people's life and residents' behaviour. *With a closer look at the basics of architecture determinism, it will become obvious that one of the factors that is useful in explaining this approach is a deterministic presupposition that is mentioned in the relationship between independent variables (living environment) and dependent variables (life and related activities) (Saegert, 1985). In this assumption life and related activities, is affected by the related environment without considering any modifying factor or moderator. The beliefs of the modern movement is based on the deterministic assumption (Lang, 1987), in the field of Iran's dignified modern Iranian high density vertical development housing this assumption is considered.*

On the other hand, without considering tendencies, beliefs, and cultural methods in different areas, the claim that design can result in special behaviours (international style) is questionable (Lang, 1987). In this regard, Gans (1968) asserts that whenever a family, wants to modify and change their culture, a change in the residential area would be effective. This attitude is close to the possibilism approach. Possibilism consider the environment to be the provider of human behaviour and a little more than that. It means that they consider the environment to consist of a series of behavioural opportunities based on which there is the possibility of doing desired behaviours and activities, which are in the framework of their culture, values, beliefs (Longdom, 1966). This view, in addition to emphasising on human basic needs, (Atkinson, 1969; Israel and Tajfel, 1972; Leighton, 1957; Maslow, 1987; Stringer, 1980), conforms to Rapoport's theory which implies the importance of housing in meeting human higher needs considering families' cultural and social configuration.

In this respect, besides the mentioned theories about spatial and human aspects, the framework of Dursun and Saglamer (2009) explaining housing quality has also been considered in this study. It should be noted that some parts of parameters of spatial aspect in the abovementioned theories conform to Venturi (1966) theory of adaptability which considers multifunctional spaces of housing of importance. Therefore, this theory is also close to the general idea of this study which is about the necessity of the possibility of benefiting from one space in different ways with respect to the general needs of human.

1.9 Significance of the Study

This study adds to the body of knowledge about the relationship between Iranian family culture and spatial organisation of the Iranian modern housing. In this aspect and with existing conflict between the modern middle-class families' culture involving their routine daily activities and their occasional rituals and spatial organisation of modern Iranian housing, the finding of the determined relationship can help designers to improve the spatial quality of modern Iranian housing through the values and spatial requirements of common pattern of Iranian middle-class life. As a result the finding can produce some recommendations that can help designers to improve quality of residents' lives through strengthening the relationship between the Iranian family culture and the spatial organisation of their modern housing.

1.10 Scope and Case Study of Research

The aim of this research is to study the housing units' interior spatial organisation of the Iranian high-rise housing in terms of Iranian modern middle-class families' culture. As mentioned earlier (page 3), the reason for selecting Iranian middle-class families in this study is the population of this social class in Iran (58%) which is the majority of Iranians (Iran Ministry of Cooperative, Labour and Social Welfare, 2014). Additionally, in this study, housing is examined as a phenomenon in relation with human life (family). In this regard, and considering the importance of the issue, new cities in Iran which will be as models of the future cities have been taken into account. Unlike Iranian traditional cities that have had organic formation and growth, six Iranian new cities have been built with a predetermined design (Venturi, 1966). Among those cities two were built before the Islamic revolution (1979) namely the new city of Pouladshahr (1973) and the new city of Shoushtar (1975). According to (Zand, 1999) four other new cities in Iran that have been designed and built after the Islamic revolution are the new city of Pardis (1991), Andisheh (1994), Hashtgerd (1993), and Parand (2007), in the order of year they

have been designed. Among the six mentioned new cities in Iran, four new cities including Pouladshahr, Pardis, Andisheh, and Hashtger have been designed and built for the low-income class and two new cities of Shoushtar and Parand for the middle class. Consequently, because this study focuses on the middle class, those two cities are closer to the aim of this study. On the other hand, the new city of Parand is an illustration of the future cities in Iran (Kheirabadi, 2000). Moreover, Kheirabadi, (2000) claims that the housing of the new city of Parand has been designed and built according to the idea of adapting housing to Iranian-Islamic culture. On this basis, high-density vertical development housing of the new city of Parand was selected as the case of this research. In addition, middle -class families residing in those buildings were examined as the second unit of analysis.

The new city of Parand is located 33 kilometers southeast of Tehran, between Robat Karim and Imam Khomeini international airport, and on Tehran-Saveh freeway. Also Parand is bordered by Zarandieh in Markazi province. The final area of Parand is 25000 Hectares (in the form of 15 residential phases, industrial towns, exhibition areas, forest parks, and 6 recreational areas) and is equivalent to one third of Tehran. In the construction of this city 7 different phases have been built of six phases of which are residential. According to Kamran et al., (2009) after designing and implementing a major part of phases 1 to 3, the government implemented the Mehr Housing plan in Parand in order to provide more housing. Based on zoning policies in the zones of this city (Kalantari Khalilabad et al., 2008) phase 5 of Parand in Aftab region has been considered as the area of high-density housing. Based on mentioned issues, this case study can help the objective of the research to be achieved with greater accuracy.

1.11 Limitation to the Scope of the Study

As the scope of this study, the research aims to describe the relationship between Iranian family culture and interior spatial organisation of the Iranian high

density vertical development housing. Thus, the focus of the study is on Iranian middle-class families' daily routine activities and their occasional rituals and the existing problems of interior spatial organisation of Iranian modern housing from the aspect of family culture. It means that other pronged like technology, climate, and locating are not considered in this study. Additionally, this research explores the families' interior spatial requirements in terms of their culture. Thus, responding to their social needs in terms of social interaction, neighborhood connections, and children playing were not discussed in this study. Besides, this study focused on middle-class families, so the values of this class are considered to identify families' common culture. Further, in this study, the interior spaces of housing units were analyzed according to the families' issues. It means that, the outdoor spaces like stairs, lifts, and lobbies were not considered in this research. Lastly, this research does not deal with families' responses from the aspect of their ethnicity. It means that to be Muslim and Iranian were necessary and sufficient conditions for the approval of the respondents.

1.12 Outline of Research Methodology

The research methodology consists of four stages including synthesis of literature review, data collection procedure, analysis of collected data, and documentation of findings. In the first stage, while investigating the concepts and definitions related to culture, the concepts and theoretical approaches to lifestyle was examined and then the elements of culture as related to housing was identified. Then, while studying the interactions of culture and built environment, approaches to interactions between environment and behaviour was analyzed, and it should be noted that Possibilism approach is closer to the view of this study. Then, considering the importance of housing as a cultural phenomenon, semantic and value aspects of housing for the residents was dealt with. After that the needs of families in the area of housing was discussed and higher needs of families which is in the area of this research, was also investigated. Since one of the important aspects of housing is the issue of family activities over time and formation of behavioural rhythms as a pattern

in life, the concepts and views related to them was emphasized and thought through. Therefore, because quality of housing is of special importance in the formation of proper relationships between a house and family, qualitative aspects of housing was discussed in terms of human and spatial aspects and the parameters related to each of these aspects including privacy and territory (In human aspect) and flexibility were analyzed from two aspects of adaptability and variability (In spatial aspect). Then by synthesizing the analyzed cases, the conceptual framework of the study was determined in the area of culture and housing. On the other hand, due to the importance of the structure and function of families in the study of culture and the manner of making a relationship with housing, the related concepts and approaches was studied and changes in the pattern of Iranian families' life in modern time was investigated. Then the changes in the model of Iranian housing were studied from tradition to modernity and the vertical growth of Iranian housing. The obtained information through synthesizing literature review was used in the process of preliminary data collection.

In the second stage, considering the main purpose of the research which is how Iranian modern middle-class families interact with Iranian high-density residential units in the new town of Parand, the method of semi-structured interview with some of the residents of the residential units, and also focus group interviewing with the resident families have been applied to collect data related to family daily routine pattern and their occasional rituals and functional problems of residential units of the interviewees. In additions the methods of overt observation, participatory observation along with photographing in some cases, and also focus group interviewing, have been applied in order to collect data about religious and national rituals. That is to say, data collection has been done with the assistance of a research assistant after the preliminary observation and pilot semi-structured interview in two sectors each of which has two phases. Therefore, in this qualitative research the triangulation methods of data collection led to a deep understanding of the phenomenon.

At the stage of analyzing data, the collected data from triangulation methods are analyzed using descriptive analysis, qualitative content analysis, and plan layout

analysis methods. In this regard, to describe the life of Iranian families including their routine daily activities and occasional religious, familial, and national rituals descriptive analysis is used. Considering the focus of this research on data collection through different types of interview (Single face to face semi-structured interview and semi-structured focus group interview), the method of coding and qualitative content analysis is applied. Additionally, considering the importance of architectural plan in studying interior spatial organisation in different zonings of the housing and also the data collected by observation, the method of plan layout analysis are applied. Plan analysis is one of the effective methods of data collection, and the information obtained from data collection through different methods was validated through a plan layout analysis. The principle of conformability in this study has been considered through the use of the principles of constructivism in designing research questions and considering them in data collection procedure through different methods. In order to provide for the dependability of the data, the original collected data in the report paper are embedded. In terms of credibility, in the present research, besides applying multiple methods of data collection (After the process of purposive sampling) including semi-structured single face to face and focus group interviews, direct observation, taking photograph and writing down the gathered information in the analysis of architectural plans, the data collection procedure was carried out in two different periods with the aid of a research assistant. Consequently, in order to improve the credibility of the research, different periods of time were selected for data collection and a research assistant was chosen to help gather the required information.

At the stage of the finding documentation, the findings of this study in terms of the relationship between interior spatial organisations of housing units in high density vertical development housing and modern Iranian middle-class family culture are documented as follow:

- a) The common patterns of modern middle-class Iranian family daily routine.*
- b) The familial, religious, and national occasional rituals of modern middle-class Iranian family within housing*

- c) *The existing problems of the modern middle-class high-density vertical development housing from the aspect of modern Iranian middle-class family life-style from the human and spatial dimensions.*
- d) *Summary of findings based on research conceptual framework of the relationship between interior spatial organisations of housing units in high density vertical development housing and modern Iranian middle-class family culture.*
- e) *Implications, recommendations, and the areas of future research*

1.13 Organisation of the Thesis

The thesis is organized into five chapters including the chapters of introduction, literature review, and chapter of research methodology, the chapter of analysis and findings, and the chapter of conclusion.

In the chapter related to the literature review, the concepts and definitions of culture and its elements are reviewed. The relationship between culture and built environment and its' related theoretical approaches are synthesized. Then by focusing on housing as a cultural phenomenon the family needs for housing in terms of their values and meaning and also the concept of time in families' activities are reviewed. Then, the dimensions of housing quality by focusing on human and spatial pronged are discussed. This part is followed by the research conceptual framework synthesized through literature, the aim of the study, and the concepts and perspectives of family in terms of its' function and structure. Then, the changes of Iranian family culture in modern period are discussed. By reviewing a brief history of modern housing, vertical growth of housing and its' related concepts, the changing of Iranian housing from tradition to modern are reviewed. This chapter is ended by mentioning Iranian housing changing process in modern period.

The third chapter is about research methodology which introduces the paradigm, strategy, approach, methods, scope, case study, and analyzing methods of this research. Thus, the qualitative approach, case study strategy, triangulation of data collection methods involving direct observation, semi-structured single face to face interview, semi-structured focus group interviewing and plan layout are reviewed in this chapter. In the chapter four the life culture of the studied modern Iranian middle-class family involving their daily routine activities and occasional rituals are identified. Additionally, the existing problems of interior spatial organisation of housing units of middle-class high density vertical development housing are described. This chapter follows by chapter five as the conclusion of the research and suggestions for future studies.

identified routine daily and occasional socio-cultural rituals. The findings of this study show that the residential units under study located in the selected Iranian middle-class high density vertical development housing, lack the necessary capability to communicate with the lives of the residing families appropriately. That is, these deficiencies are the result of neglecting the family culture in the process of design and construction of these buildings. Therefore, this study attempted to propose some skills for designing each space besides appropriate connection diagrams between each space and the rest of the spaces, by investigating the residing families' culture including their routine activities and occasional socio-cultural rituals. Hence, in summary, it can be noted that planners and designers need to consider the social and cultural needs of families as well as their physical needs in order to plan and design modern housing.

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