

Process of Housing Transformation in Iran

Mahta Mirmoghtadaee

Abstract: Iranian houses have changed dramatically in recent decades. The changes took place in three different periods in which social, economic, and technological transformations caused physical and morphological changes. This paper discusses the process of change analytically, emphasising the importance of compatibility between the house form and lifestyle. The spatial characteristics of traditional Iranian houses reflect natural, geographical, and cultural needs. There was a harmony between people's needs and the physical characteristics of the house. In the transition period, however, a new residential type appeared, in which living spaces were categorised according to their general functions. Spatial arrangement, together with plan layout and proportions, facilitated the limited potential for varied lifestyles. In the contemporary period, apartment buildings became prevalent. In this new type of residence, the physical characteristics of the house have changed considerably, while living habits and lifestyles have not changed at the same pace. This paper concludes that habitats should be physically harmonious with traditions and lifestyles; otherwise, residents would react and try to change the environment according to their wishes. When the environment itself is not changeable, residents have to adapt themselves to their new conditions; consequently, some valuable traditions would be lost forever.

Keywords: Housing, Iran, Traditional, Contemporary, Lifestyle

INTRODUCTION

Development and urbanisation in Iran is leading to the gradual replacement of individual houses with residential multifamily complexes and apartments. These new dwellings were largely designed by foreign construction companies and Iranian architects educated abroad with minimum knowledge of Iranians living traditions and lifestyles. In the first comprehensive plan of Tehran, which

was prepared with the assistance of French companies, it was explained that one storey houses are the consequence of poor construction techniques, and central courtyards are the reflection of old social convention, women's freedom will eliminate the need for introverted areas and will add to the prevalence of apartment living. Balconies will substitute for courtyards, and elevators will increase the number of building stories (Farmanfarmaian and Gruen, 1968).

Building and Housing Research Centre, Tehran, IRAN.

*Corresponding author: mmoghtada@yahoo.com

This kind of analytical approach focuses only on technical aspects, and consequently leads to conflict between architectural design and traditional lifestyles. In the new living environments, all spatial characteristics of traditional houses have been lost. This substitution results in different spatial characteristics that were developed according to enforced modern lifestyles. However, while the physical appearance of dwellings has changed thoroughly, the living habits and lifestyles have not changed with the same pace. It is a fact in all human societies that authorities can change the external aspects of life, while internal, private elements that originate from the culture cannot be changed as easily. In the present paper, we first review the literature on the relationship between housing form and lifestyle. We then analyse the transformation process of housing in Iran, which has taken place gradually over the last century.

TRANSFORMATION OF HOUSING FORM AND LIFESTYLES IN DEVELOPING COUNTRIES

Settlements have historically been shaped by their need to be compatible with social norms and lifestyles. As Nasr noted, "the external environment which man creates for himself is no more than a reflection of his inner state" (Nasr, 1978). This reveals the connections between social needs and the built environment. The prevailing lifestyle, rooted in

social and cultural characteristics of the society, is embodied in the composite elements of residential units. Early in the 20th century, a drastic change in architecture took place in many developing countries, as the traditional architectural style was replaced by the modern style. This change occurred so rapidly that it represented replacement rather than adaptation. Thus, local architectural forms, which had responded to the physical and cultural requirements of the people for thousands of years, were neglected completely (Behsh, 1993). As Bianca conveys, there are some structural conflicts between traditional Islamic concepts and modern Western planning methods. Some examples of the conflict are different concepts of community structure, planning, and architectural forms (Bianca, 2000).

However, changing the physical characteristics of the environment is much easier than intervening in social and cultural norms. Therefore, while modern style has rapidly changed the housing units, modernist ideology was unsuccessful in making drastic social changes. As a result, people could not follow their customary patterns of life in the new houses. For example, in many Muslim societies, the traditional house was developed to accommodate an extended family comprising several generations. The spatial characteristics of the house offered each generation the possibility of adhering to its own way of life, while at the same time maintaining a mutual relationship

between generations. This pattern of living, which gave society continuity and social integration, has begun to disappear (Behsh, 1993).

On the other hand, developing countries have faced important changes in household composition, and extended families have been replaced by core families composed of 4 to 5 members. As a result, important changes took place in the physical form of houses and households, while they tried to preserve their cultural values. An ideal house form, in this regard, should respect the needs of a new generation, while at the same time it should be adapted to cultural values and traditional lifestyles.

TRADITIONAL IRANIAN HOUSES

Demographic Features

The dominant household model in Iranian traditional society was the patriarchal extended family. Its members would include an initial couple, its children, and families of these children (Ladier-Fouladi, 2002). Data on the traditional family in Iran are scarce, but one study found an average of 6.5 live births for each Iranian woman living in an urban area during the 1936-1966 period (Hesamian et al., 1996). It is expected that in a traditional urban house,

the initial couple would have 6 to 7 children who would marry in their teens and remain close to the family after marriage. Furthermore, polygamy was common in wealthy families, which further increased the number of family members. It is apparent that in these conditions, the residential unit should accommodate the changing needs of a rapidly growing family.

Physical and Functional Characteristics

The spatial characteristics of traditional Iranian houses reflect natural, geographical, and cultural needs. An important aspect of the traditional Iranian house is its adaptation to the harsh climate of the central parts of the country. Notable climatic problems are harsh sunlight and temperature in the summer; diurnal fluctuations of temperature; low humidity; limited water supplies; and dusty, sandy winds. In areas of Iran with a hot and arid climate, special traditional designs found solutions to these problems. Therefore, the urban design and architectural style show evidence of these solutions (Tavassoli, 2002). The majority of traditional houses are introverted, or look inwards. All the spaces were arranged around an open, rectangular courtyard that formed the link between different areas of the house. The arrangement follows certain geometrical rules. According to Haji-Qassemi, this geometry not only defines the general body of ensemble and gives shape to its every single detail, but also imposes

a hierarchy to its different areas, which determine their locations and relationships in accordance with their character and importance. While harmoniously connected to each other in the design, the areas of the house enjoy complete independence and are always separated from the others by intermediary areas (Haji-Qassemi, 2003).

In an Iranian house, rooms are usually arranged around the courtyard in such a way that the summer rooms always face the north: away from the hot summer afternoon sun, while winter rooms are located on the opposite side (Kheirabadi, 2000). The rooms were known by their morphology (TALAR), the number of doors or windows (*panjdari*, which means a room with five doors),



Figure 1. A *panjdari* in a Traditional Iranian House, Yazd, Central Iran.
Source: Author

the location (*balakhaneh*, which means a room located on the second floor), the time of usage (winter room), and only rarely according to their function (kitchen) (Rafieisereshki et al., 2003). Figures 1 and 2 show two examples of rooms in traditional houses. Service areas were traditionally separated from living quarters. This separation causes all service areas, such as kitchens, lavatories, storerooms, and stables, to remain hidden from sight and not interfere with inhabitants' comfort (Haji-Qassemi, 2003).



Figure 2. Interior Decoration of a Room, Shahrekord, Western Iran
Source: Author

Semi-open spaces such as the *iwan* had an important role in articulating open and closed spaces (see Figure 3). The *iwan* is a vaulted hall or space, walled on three sides, with one end entirely open. Typically, *iwans* open onto a central courtyard, and have been used in both public and residential architecture (see Figure 4). Rooftops and basements were also used in different seasons to accommodate relevant functions in the house.



Figure 3. *Iwan* in a Traditional House Located in the City of Dezful, Southwestern Iran
Source: Author



Figure 4. Central Courtyard of a Traditional Iranian House, Yazd, Iran
Source: Author

Lifestyles

Extended families were the dominant household model in Iran, composed of up to three generations, living together in the same house. After the sons' marriage, according to the household economic conditions, the house would expand or be sub-divided to create new living spaces. In this case, the house, like a living organism, would grow and adapt to the new situation.

Most houses accommodate varied functions, not limited to residential activities. In some cases, the house was also the workplace. This would happen when the head of the family had an office or workshop in an independent area of the house. In this case, the interior territory of the house (*biruni*) would be separated from the exterior area (*andaruni*), with the *andaruni* occupied by women and children, and the *biruni* by men and visitors (Einifar, 2003). Women had an important role in household economic activities. Apart from cooking, washing clothes and dishes, and taking care of children, they produced handicrafts such as rugs and textiles (Soltanzadeh, 2005). House spaces were adapted for these varied activities. Therefore, an Iranian house was a multifunctional unit designed for residential, economic, and service functions.

CONTEMPORARY HOUSES

Since the beginning of the 20th century, Iran has witnessed great social, economic, and cultural changes that have influenced different aspects of Iranian life. Architecture, as the physical embodiment of social life, has changed to a great extent. Contemporary housing began to be constructed in Iran around 1961 (Haeri, 1997; Soltanzadeh, 2005). The period from the last years of the Qajar dynasty to the beginning of 1961 was called the transitional period (Soltanzadeh, 2005). The architecture of the transitional

and contemporary periods saw the emergence of different styles, depending on new building technologies and various other influences.

Transitional Period (the last years of the Qajar dynasty to 1961)

In the transitional period, neighbourhoods lost their mixed-use social and economic functions and changed to strictly residential districts. Land parcels were reduced in size and shaped more geometrically, mostly in rectangular forms. The rectangular lots influenced the spatial characteristics of the houses. As the lots became narrower, the built area had to be located in the northern and southern parts of the land, with the courtyard in the middle. When the house faced south — which was the case in most examples — the northern part, facing the sun, was the main two-storey residential area, with the ground floor allocated to living areas and the first floor to guest rooms. The other section usually had one storey above ground and one below. The kitchen and service areas were located in the basement, below ground level (Soltanzadeh, 2005).

In this period, electrical and mechanical systems were introduced to the buildings for the first time. As a consequence, kitchen and service areas, which were usually far from living spaces, received the benefit of new

sanitary facilities and could now, be located closer to the main living areas.

Contemporary Houses (1961 to Present)

Demographic features

Census data taken in 1986 and 1996 show that the nuclear family dominates the urban areas of Iran. The proportion of nuclear families grew from 80.1% of total households in 1986 to 83.5% in 1996. Conversely, the proportion of extended families is in decline 6.3% of households in 1986 as opposed to only 0.4% in 1996. Other household compositions have shown growth from 13.6% in 1986 to 16.1% in 1996. The "other" category consists of single-person households and households with several people who cohabit but may not be related (Ladier-Fouladi, 2002). Similar studies show that while the average Iranian women in 1966 had a total of 7.7 children (both in rural and in urban areas), it decreased to 2.17 children each woman in 2000 (Abasi and Asgari, 2005). The figures show considerable demographic changes in household size and composition. However, although households have changed physically, they are still bound to traditional cultural values, and families are still the strongest social units in Iranian society (Beheshti, 2007). Household changes imply that presently there is no need for big houses to accommodate several families. However, higher

living standards generate more demands and expectations from the family members.

Physical and functional characteristics

In the contemporary period, traditional houses were largely abandoned while apartment buildings became more prevalent. In the new type of residence, each household had smaller living areas and a shared courtyard (as opposed to the individual courtyard of traditional houses), which belongs to all families living in an apartment building (see Figure 5). New building regulation, which allows buildings to cover 60% of the land parcel and left 40% for open space, had a great effect on the spatial organisation of houses as well as on urban design. The central courtyard is now located in the front and multi-storeyed apartment buildings became the dominant type of preferred housing (Soltanzadeh, 2005).

The biggest change was the assignment of single functions to the living spaces, transforming the multi-functional character of the room. The living room was dedicated for daily activities, the guest room for accepting relatives and friends, bedrooms as personal spaces, and kitchen, bathroom, and toilets for services (Soltanzadeh, 2005). This new type of residence introduced modern facilities for more comfortable living, but departed greatly from the familiar traditional houses (see Figure 6).



Figure 5. An Ordinary Residential Building with a Shared Courtyard, Tehran, Iran
Source: Author



Figure 6. A Living Room in a Contemporary House, Tehran, Iran
Source: Author

Lifestyles

Modernisation in Iran has led to many social, cultural, and physical transformations. However, these changes concentrated on the physical or external aspects of life, leaving unchanged most cultural norms and values that constitute living habits. New apartment buildings, which are the most commonly used residential pattern in big cities, are completely different from older traditional houses.

The contrast between lifestyle and living spaces is an unsolved problem, especially in multi-family residential complexes. An Iranian family living in an ordinary apartment building has no chance to choose its neighbours. In big cities, people from different parts of the country, speaking their own languages and living according to their original cultures, reside next to each other. This makes for serious problems among people with different beliefs and diverse living habits.

Contemporary dwellings are much smaller than the traditional ones; thus, semi-public and private spaces could not be separated physically (see Figures 7 and 8). However, Iranians are still following traditional rules of *biruni* and *andaruni*: guest rooms are decorated with beautiful Persian rugs and other ornaments to accept guests

respectfully, while private areas, hidden from sight even with a separating door, are very simple. New apartment houses are extroverted and have windows opening to the streets. However, as Iranians are accustomed to hiding their living spaces from the view of outsiders, windows are always covered with thick curtains. Similarly, balconies are used as storage spaces or combined with the adjacent interior rooms (see Figure 9).

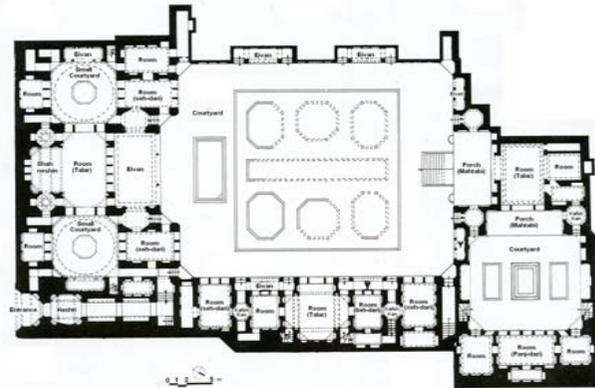


Figure 7. Plan of a Traditional House (Tabatabai Mansion), Kashan, Iran
Source: Haji-Qassemi (1996)

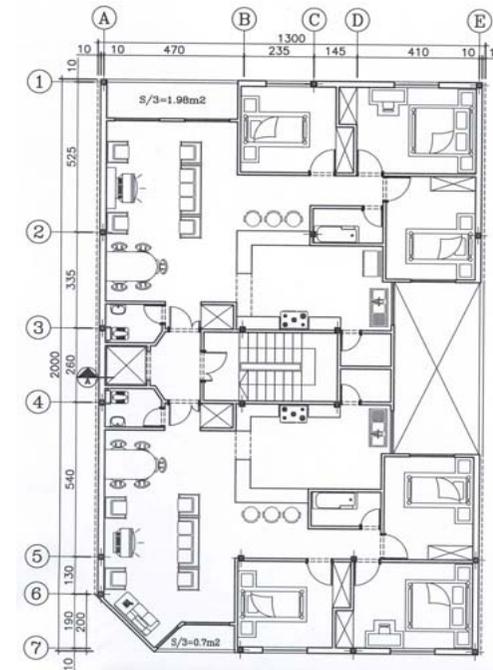


Figure 8. Plan of a Contemporary Residential Building with Two Units in Each Storey, Tehran, Iran
Source: Author



Figure 9. Adaptation by Using Balconies as Storage or as Parts of the Adjacent Room, and by Covering Windows with Thick Curtains, Tehran, Iran
Source: Author

Modern facilities played a great role in changing living habits. For example, the use of electrical cooking equipment and ready-made meals has become more common. Therefore, the kitchen is now losing its traditional importance and becoming a place for warming foods and washing dishes. Women are more active in social and economic activities, and spend less time on housework and taking care of children. Facilities such as nursery schools and ready-made food simplify their lives and facilitate a more active social life.

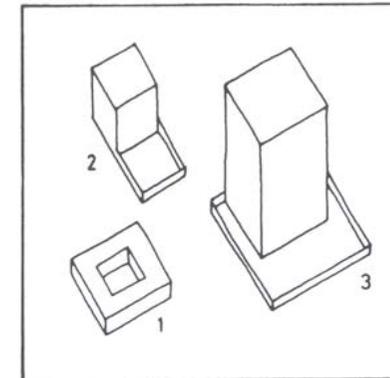


Figure 10. The Changing Pattern of the Building Form, From (1) an Inward-looking, Low-rise Courtyard House to (2) an Outward-looking, Medium-rise House with a Courtyard, to (3) High-rise Apartment Buildings
Source: Madanipour (1998)

CONCLUSION

Iranian houses have changed dramatically in recent decades (see Figure 10). These changes have taken place in three different periods during which social, economic, and technological transformations caused physical and morphological changes. In the traditional period, house forms were compatible with people's needs. In the

contemporary, in contrast, house spaces were not designed in accordance with current lifestyles.

The physical characteristics of houses have been transformed profoundly. Inward-looking courtyard houses changed to outward-looking residential complexes with a shared courtyard. The arrangement of the housing space, which used to follow geometric rules, now follows the geometry of land parcels. Multifunctional spaces are replaced by single-function rooms. The combination of open, semi-open, and closed spaces, which formerly enhanced spatial diversity, has been replaced by a shared courtyard and private, closed living spaces. Balconies, which were intended to substitute for courtyards, were instead combined with closed spaces and used chiefly as store-rooms. There is no usable rooftop or basement to accommodate living activities in hot summers.

The physical changes took place simultaneously with social transformations. Patriarchal extended families, which were formerly the dominant household model in Iranian traditional society, were replaced by independent nuclear families. Household sizes have declined considerably, and new forms of household composition are gradually appearing.

However, the lifestyle has not changed significantly. In the process of urbanisation, some authorities have tried to

enforce fundamental changes on residents' culture by transforming their physical environment. Experience has shown the failure of this process: habitats should be physically harmonious with traditions and lifestyles; otherwise, residents will react by changing the environment according to their wishes. When the environment itself is not changeable, residents have to adapt themselves to the new conditions; consequently, some valuable traditions would be lost forever.

REFERENCES

- Abasi, M.J. and Asgari, A. (2005). Household changes and fertility reduction in Iran, a case study of Yazd. *Nameye-olum-ejtemai, A Journal of the Social Sciences*, 25: 25–75.
- Behsh, M.B. (1993). *Towards Housing in Harmony with Place*. Sweden: Lund Institute of Technology, Lund University.
- Beheshti, S.M. (2007). A conversation with Seyed Mohammad Beheshti. *Abadi Quarterly Journal of Architecture and Urbanism*. 17(55): 120–129.
- Bianca, S. (2000). *Urban Form in the Arab World*. UK: Thames & Hudson.
- Einifar, A. (2003). A model to analyze residential spaces: based on flexibility criteria of traditional housing. *Honarhaye ziba Journal of Faculty of Fine Arts*, 13: 64–77.
- Farmanfarmaian, A. and Gruen, V. (1968). *Tehran Master Plan*. Tehran: Vezarat emaskan va sharhrsazi.

- Haeri, M. (1997). Designing the contemporary house and the architectural principles of traditional houses. *Abadi, Quarterly Journal of Architecture and Urbanism*, 6(23): 18–28.
- Haji-Qassemi, K (2003). *Iranian Islamic architecture, (Vol., 14), Yazd houses*. Iran: Rowzaneh Publication.
- Haji-Qassemi, K (1996). *Ganjnameh (Encyclopedia of Iranian Islamic architecture), First Volume: Masions of Kashan*. Iran: Shahid Beheshti University Publication.
- Hesamian, F., Etemad, G.H. and Haeri, M. (1996). *Urbanization in Iran, (2nd ed.)* Iran: Agah Publication.
- Kheirabadi, M (2000). *Iranian cities*. Iran: Syracuse University Press.
- Ladier-Fouladi, M. (2002). Iranian families between demographic change and the birth of the welfare state. *Population (English Edition)*, 57(2) : 361–370
- Madanipour, A. (1998). *Tehran: The Making of a Metropolis*. New York: John Wiley & Sons.
- Nasr, S.H. (1978). *The contemporary Muslim and architectural transformation of the Islamic urban environment. In Toward an Architecture in the Spirit of Islam. R. Holod, (ed.)* Philadelphia: The Aga Khan Award for Architecture.
- Rafieisereshki, B. Rafizadeh, N. and Ranjbarkermani, A.M. (2003). *Descriptive Dictionary of Persian Architecture*. Iran: Building & Housing Research Center (BHRC) Publication.
- Soltanzadeh, H. (2005). From house to apartment. *Architecture and Culture Quarterly*, 7(23): 142–154
- Tavassoli, M. (2002). *Urban structure and architecture in the hot arid zone of Iran*. Tehran: Payam and Pivand-e-no Publications.