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## Original Article

# Investigating the process of traditional design principles formation in the Iranian-Kurdish urban quarters

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**Abstract** The traditional urban quarter is considered here as a materialized form of human thoughts, skills and resources which created functional, meaningful and identifiable spaces in relation to society, time and place. Regarding these leading points, this research focuses on traditional Iranian-Kurdish urban quarters of Qatâr-chyân to investigate its design principles. Various approaches to traditionally built forms were reviewed to pave the way for a methodological inquiry. The data were generated through historical archives, direct observation of the existing built form and interviews with elderly. The findings enable us to discover the shaping design principles which characterize the urban character of the selected quarter as a distinctive traditional urban form especially as compared to other Islamic-Iranian cities. These findings can be recognized as indigenous rules embedded in the structure of traditional quarters which can help designers to reconcile the traditional and modern urban architecture by applying these principles in city conservation plans or new development plans in the city suburb.

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## Introduction

Urban and architectural artifacts of traditional environments can be seen as important imprints of human activity which have evolved over many centuries according to strong socio-cultural and environmental rationalities (Ergecgil, 2001). This means that “the morphology and spatial patterns of traditional cities have gradually developed to satisfy the cultural needs of their populations and, at the same time, to respond to their surrounding environment” (Kheirabadi, 1991, p. 1). This defines man-made environment as the content of meaning<sup>1</sup>, especially when it is considered in its mutual relationships with the surrounding environment and in the context of history, because man tends to “dwell when he can experience the environment as

meaningful” (Norberg-Schulz, 1980, p. 5). The traditional urban quarter is considered here as the materialized form of human thoughts, skills and resources which created “functional, meaningful and identifiable spaces in relation to society, time and place” (Ozaslan, 1996, p. 3). In line with the above notions, traditional urban quarters can be considered as irreplaceable assets representing the investment of centuries of knowledge and lessons which weave the various physical elements and spatial units together in particular contexts. For this reason, such environments are “a treasure house of human experience – of successes and failure” (Rapoport, 1989, p. 100), good examples of “problem solving a total response to the challenge of climate and topography” and demonstrating an adaptation of man to the ebb and flow of social and

political history of particular nations in a long process of trial and error (Ahmad and Malcolm, 2001, p. 72).

Regarding these leading points, the primary aim and focus of this study is to investigate and identify the shaping design principles of actual physical configuration and arrangements which have formed the traditional quarter of Qatâr-chyân. The main aim leads to a number of objectives framed as questions<sup>2</sup>.

1. How was the traditional quarter of Qatâr-chyân formed?
2. What shaping design principles were applied in its formation and gave birth to its character?
3. What can we learn from this study about the future prospects of the city and others in similar situations?

### Attitude Towards Traditionally Built Forms

“The reason we are interested in traditional forms of buildings, dwellings and settlements is that we believe that such achievements met human needs in a more sensitive way than contemporary and/or alien methods do. It is this belief that sends us back to the past...” (Abu Lughod, 1992 quoted in Bianca, 2000, p. 184).

In the view of Oleg Grabar, architectural historian, the concept of tradition can be viewed in two ways: “One is that of a body of culture which existed before a development took place; tradition is the past of a culture, and, like any past, it is by definition dead... As such, it can become a ghost and a sound of inspiration, but it no longer exists except as a monument, as a memory (if not a souvenir), as a statement of another time. The second idea is that tradition is a body of habits, beliefs and behaviours which exists, but which is, in a sense, independent of development. Traditions are philosophical and theological systems which affect the minds and souls of men and women. It is reasonable to imagine that such systems could and should affect development, because they are vehicles for moral and aesthetic judgement and, therefore, provide a stamp of approval for anything done” (cited in Bechhoefer, 2001, pp. 51, 52).

The first view implies a museum approach to the traditional built environment without desiring the contextual meanings. This means dislocating the sense of unity in urban settlement in order to freeze a monumental feature as a milestone to

indicate memory. In the second view of tradition, it is seen as a flow of knowledge or a body of beliefs which exist in the memory and in architectural artefacts and affect and facilitate our perception and judgment about development. In line with this judgment, Rapoport (1999, p. 57) summarised four possible attitudes of dealing with the traditional environment:

1. It can be ignored – which is still the most common attitude.
2. One can admit its existence but deny that it has any useful or worthwhile lessons.
3. It can be copied – its shape, details, massing and so on (as it is romanticized).
4. One can derive more or less general lessons and principles from it, through the use of studies, concepts, models and so on. It is these lessons that are then applied in design.

Based on the concept of tradition<sup>3</sup>, the last one is a viable approach to such environments, learning lessons and principles that then become the points of reference for other studies as precedents rather than imitation (Rapoport, 1990, pp. 32–33).

### Approaches to Traditional Built Form

As there is no single approach in studying traditional built form, it has been studied and benefited from different points of view, and by a variety of disciplines. Among these approaches; townscape (initiated by works of Sitte, 1889; Unwin, 1909; Cullen, 1961), organism pattern (Smith, 1973; Alexander, 1987), imageability (objective approach launched by Lynch, 1960), environmental-behaviour relations (started by works of Rapoport, 1969, 1977), historical (Benevolo, 1980; Blumenfeld, 1982; Hakim, 1986; Kostof, 1991, 1992; Morris, 1994), typological (Rossi, 1982; Gregotti, 1985), phenomenological (Tuan, 1977; Norberg-Schulz, 1980) and morphological (developed by Conzen, 1969) are the famous ones.

Each of these approaches emphasise some aspects of the built form at the expense of others. The review of them will make clear that there is a shared notion among them concerning the process of making the city and the relatedness of both the social and the physical components. This implies that the built environment does not “simply appear overnight, like a movie set springing up on a vacant lot, but has to be produced” (Hall, 1998, p. 13). Thus, the first point in studying such



an environment is considered to be the tracing of time in the evaluation of the city and keeping in mind that the whole is more than its parts. Therefore, the design principles of traditional built form can be derived from the production process of its built form—"the way its structure was actualized" by many factors over the course of time—because these principles (as socio-spatial qualities) lie in the way its fabric was assembled (Ozaslan, 1998, p. 257).

This can be recognized as an approach which aims to consider a balance between two major lines of other approaches, those which focus on the physical environment (both natural and manmade) and those which focus on the social environment (political, economic and cultural). Considering the nature of traditional environments<sup>4</sup>, we shall highlight three lines of inquiry within the socio-spatial approach to point the way forward in considering the main aim of this research.

1. As the main scope of the research deals with the traditional environment in the Iranian context, the main line of the research can be recognized as being in the realm of the historian. The preferred approach is Kostof's inquiry into the urban form (Kostof, 1991, 1992). In order to make clear the process of traditional built form evolution, the morphological approach, the basic concern of the historian, helps to draw the site influences, phases of change and growth and its management across time in the selected quarter. This is possible when the interplay of different factors is considered within morphological studies.
2. As the study tackles an urban form with a particular socio-cultural background within the Iranian context, it is not free of the social and cultural values of that context. For the content dimension of built form, we rely on the ideas of Rapoport (1977) and Hakim (2007), especially his analytical techniques to depict the socio-cultural values embedded in the features of the urban form which also embraces the decision-making process including rights and responsibilities.
3. In addition, as the research deals with the shaping design principles of the resulting urban form, especially its physical configuration and arrangement, it also made use of the townscape approach as part of formal analysis alongside analytical techniques to interpret urban form configuration and its spatial values at different levels.

In summary, the above points clarify three lines of the research which begin from the historical evolution of the built form, move to the content of this evolution leading to the physical form. This means that the research approaches the selected built form from its socio-cultural content interrelated with its formal character.

## Methods of Generating Information

"Although the past is not accessible to direct inspection it has left ample traces of itself in the present, in the shape of documents, buildings, coins, institutions, procedures and so forth" (Walsh, 1958 quoted in Arnold, 2001, p. 4).

In an historical study of built form, Kostof (1991, p. 10) indicates, "there is no easy way to appropriate the past. Walking in an old town Centre, sketching it and thinking about it, is instructive in a direct way. It is the first and indispensable step. But it will not tell us what really happened until we turn to the archives, the history books, the old maps – until we assemble all the evidence, some of it often contradictory, that will help explain how a particular downtown got the look it now has".

In line with this idea, historical archives and direct observation of the existing built form and interviews with elderly are major sources and methods to understand the actual physical configuration and arrangements which have shaped the Qatâr-chyân quarter. For details, physical survey including fieldwork notes as well as recording on maps and plans, taking photographs, and analytical drawings are also used.

In line with conceptualized approaches, the following steps can be considered to draw Qatâr-chyân quarter design principles: structuring elements, social principles-public domain, spatial principles and private domain.

## Historical Background

The city of Sanandaj foundation is traced back to the period of Shâh Safi (1629–1642), sixth king of the Safavid dynasty (1501–1736). Before this period, particularly before Islam, the local and other historical records did not show any clear trace of a city on the site of Sanandaj. But the

presence of sacred sites within the city implies that the site of the city was an arena for human settlements in the period before the rise of Islam, especially during the Median and Sassanid Empires (728–550 BCE, 224–641 A.D.). These include the mound of Toos-Nauzar in the east of the city, a place of a great Iranian champion which lies like sleeping turtles upon the landscape and the Âwear Mountain in the south as “the second place of Zoroaster’s inspiration” (Dultshahi, 1984, pp. 88, 150; Figure 3). The hill became known as the hill of Toos-nauzar.

For the period of the Islamic Empire onwards, especially the period after the Caliphate, there are some points in the literature (VaqaieiaNegar Kurdistan, 2002<sup>5</sup>, p. 27; Sanandaji, 1996<sup>6</sup>; Mardukh, 2000; Bidlisi, 1994<sup>7</sup>) and even some evidences on the site which confirm the presence of settlement on the site of the city. The cemetery of Sheikhân, located in the west of the city (Figure 3), which contained old graves of mashâeikhs (plural of sheikh) date back to nine hundred years ago. For other evidences, it is possible to draw attention to the graves of Hâjara Khâtoon and Peer Omar. The first was identified by local historians as the sister of Imam Rezâ (the eighth Imam of the Shiite sect). It was located beside the course of the city’s wall close to the north gate and the probable main caravan route to the west of Kurdistan and the Iraq region (Figures 2, 3). In the case of the second grave, there are differences among the historians: some identify it as the grave of Imam Ali’s son (the first Shiite Imam and the fourth Sunni Caliph) and some others ascribe it to Imam Ali Zain AL-âbedin, the fourth Shiite Imam. Its location is close to the seat of power, the qalâ or citadel (Figure 4) adjacent to the Arg square in front of the qalâ. The presence of these graves highlights the site of Sanandaj as an important place during the Islamic Empire because the imams and their descendants usually settled in and visited important and populated regions in order to carry out their duties in guiding the people towards the religion of Islam. Considering these evidences, it can be claimed that the site of Sanandaj was populated before its foundation up to the Mongol invasion (13th century).

The intrusion of the Mongols caused the collapse of city organization and the domination of a nomadic way of life in Iran. As a result of this, many cities even throughout Kurdistan were demolished and this led to the formation of a “defense-plunder” approach (Habibi, 1996). This invasion and, later on, the division of the Middle

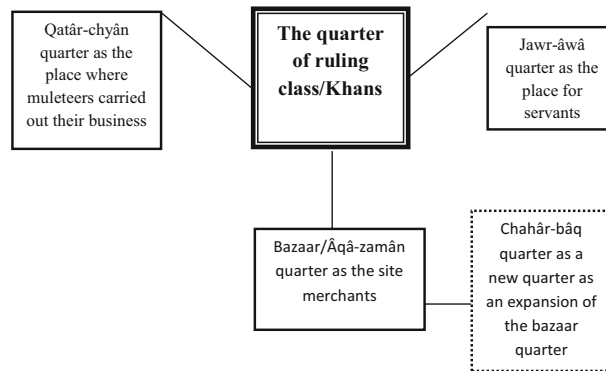


**Figure 1:** *Hassan-âwâ qalâ.*

*Sources:* from Schmidt, (1940). Oblique aerial view of the remnants of Hassan-âwâ qalâ from the period of mound cities which shows its planned structure.

East into two warring empires (Persian and Ottoman), with their line of fire being the heartland of Kurdistan (Izady, 1992), resulted in devastating wars in later periods. As human settlements were, in general, at high risk of attack and being plundered, the surviving inhabitants took refuge in strongly fortified and shrunken urban islands on the tops of the high mountains in order to defend themselves (Izady, 1992). This movement recalled older concepts of city organization in the form of mound-cities or qalâ-city built in inaccessible places. The root of this can be traced back to the period of the Median Empire (728–550 BC), when the organisation of the country was based on the mound cities located in strategic places. It usually comprised a strong qalâ (castle) on the top of a mound which implied a planned structure (Figure 1). The settlements were usually located on the slope of the mound and behind the battlement walls of the qalâ (Habibi, 1996). Due to such circumstances in the region, it appears that the site of Sanandaj became unpopulated or disregarded by the rulers as a seat of power for several centuries; instead, people lived on the top of inaccessible mounds and places in the Zagros mountain range (Figure 1). For the same reason, the literature shows no trace of settlement as a town on the site of Sanandaj from the Mongol period up to the foundation of the city in 1639. During this period (the time of Mongol invasion to the city’s foundation in 1639), the structure of mound cities including four castled cities as “mobile capitals”<sup>8</sup> dominated over the region of Kurdistan by the rulers of Ardalan. Mobile capitals created a semi-independent status





**Figure 2:** The satellite organisation of the Sanandaj's city quarters.

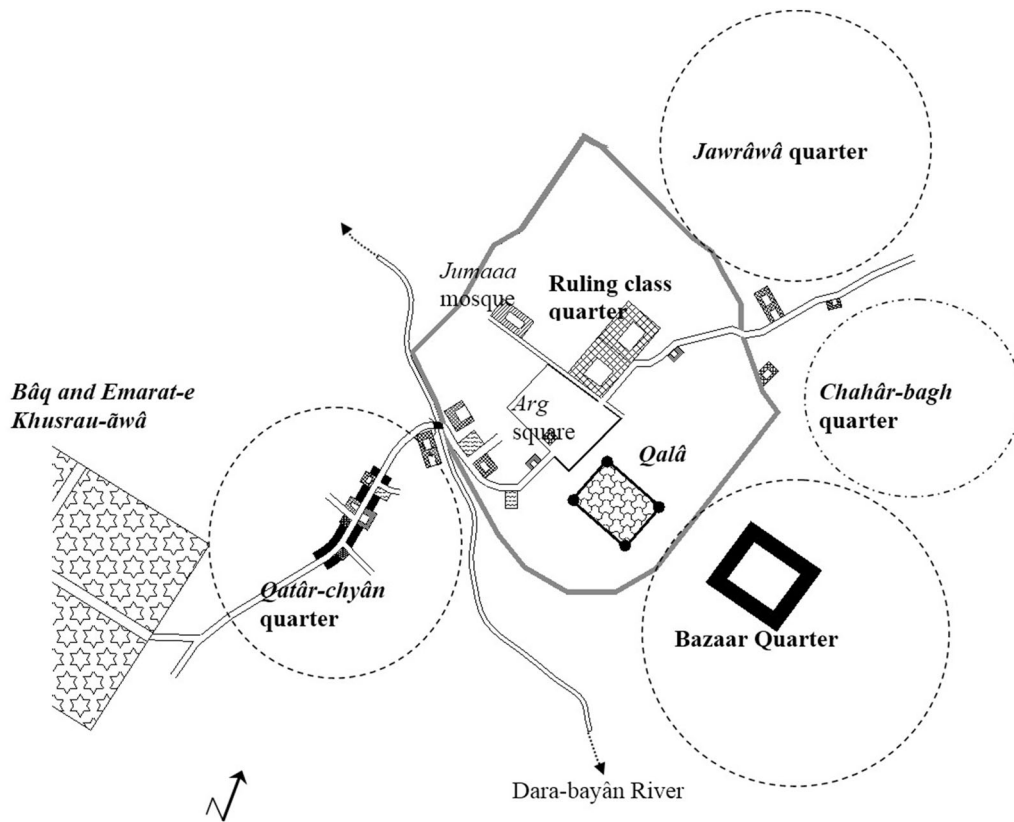
on the “Perso-Turkish” frontiers (Minorsky, 1943) for the leaders of Ardalân and this was intolerable to the Safavid Empire. For this reason and as a result of the Iran–Turkey peace treaty of Zuhâb on 17 May 1639 (Vasilyeva, 2000), Sulaymân-khân Ardalân (who was one of the commanders of Shâh Safi’s army) was ordered to destroy the fortresses and move his residential site to the current location of Sanandaj.

Considering the above points, the city of Sanandaj was formed and evolved from the concept of mound cities which established the walls around the palaces and the ruling houses as the symbol of the Khân’s (ruling class) authority in 1639 (Alizadeh, 2004). This diverged it from the general pattern of quarter formation in Iranian cities, which was usually bound to the linear form of the bazaar as the backbone of the city, to a typical form of “self-centered” and self-contained” character in line with Khân’s interests. To some extent, the centre of gravity of the city was based upon the source of power (qalâ/citadel) instead of on the bazaar due to political importance of the city which far outweighed its economic function. Therefore, the course of the principal route was formed consistent with the center of gravity being within the inner shâr leading from northeast (where a parade of troops usually accompanied the new Wâli and other Iranian authorities to the inner shâr and then to the square in front of the qalâ) to the southeast (where the summer house of Wâli was located on the slope of Âwear Mountains) along which most of the quarters evolved and the bazaar was excluded and maintained as a point (instead of as a line) within the maze pattern of streets outside the city walls (Figure 3). This orientation made the city’s main quarters centripetal cells of the city to such an extent that Vasilyeva stresses:

“The quarters/Mahallas were the basic structural and territorial cells of the city and the basic units of the town society. They are regarded as village-like communities within the urban whole, as [some of them even] resembled physically separated entities” (Vasilyeva, 2000, p. 7).

In other words, the quarters were organized as a collection of villages which circled the nucleus of power in the form of satellite quarters according to their social and professional backgrounds (Figure 2). This partitioned the city into four main quarters so that the central part was occupied by the seat of power and ruling houses (Miyân-qalâ) which formed the inner shâr, the outer city comprised the quarters of Jawr-âwâ to the north as the servants’ quarter, Mahalla-ye bazaar (Âqâ-zamân) in the east as the location of the merchants (bazaaries) and Mahalla-ye Qatâr-chyân in the south as the place of muleteers (who transported the goods). These four quarters embraced the core to supply the needs of ruling class and what a medium-sized city needed to function. Each Mahalla was in turn divided into subsections which were also called Mahallas.

Regarding the above figures and explanations, the fourth part of the city comprises the quarters of Qatâr-chyân and the garden complex of Khusrau-âwâ on the south side of the inner shâr/city and was separated by Dara-bayân River from the other parts (Figure 3). As explained earlier, this quarter was the place of muleteers who usually transported the agricultural products of the region to other cities including Hammadân, Zanjân, Tehrân, Isfahân, Rasht and to some parts of Iraq; Mosul, Sulaimânia, and Baghdad. In returning, they also supplied the demands of the city merchants and the necessary goods for the city and its region. Due to its well-known character and its separation from the main city, it contained two active

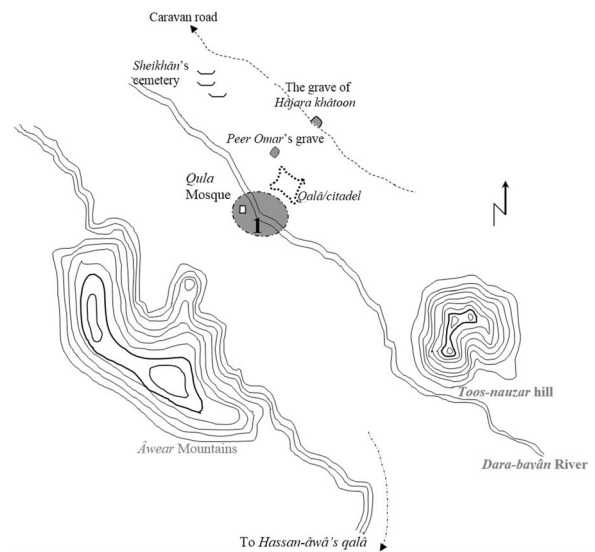


**Figure 3:** The city's main quarters and the course of the principal route and its influential role in the organisation of the city's main quarters.

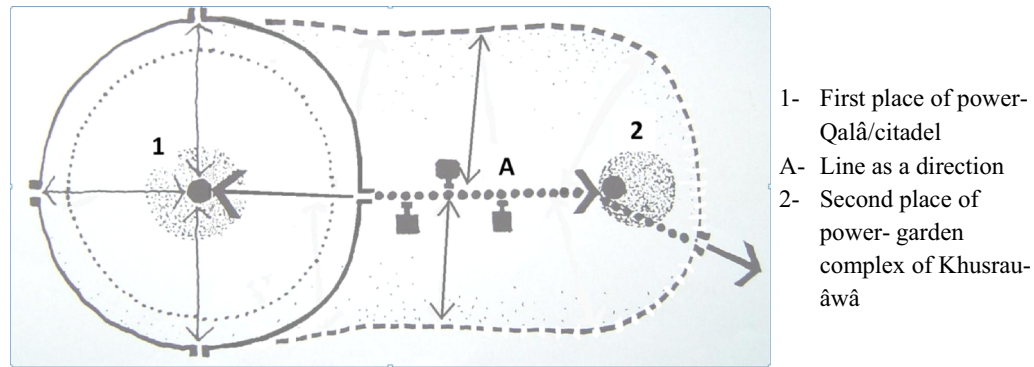
bazaarché (small bazaar) and a seat of power (Wakil's edifice).

### Structuring Elements

For more details concerning structuring elements of the quarter, its process of formation was examined through morphological analysis to draw out the quarter's evolution over the course of time (Figures 4, 6 and 7). This analysis revealed various socio-spatial factors affected the built form of the quarter. The quarter's evolution was, in the main, influenced by two concepts of point and line. The existing pass way to Âwear Mountains was intensified in time by the movement of a center as a single point in space—The qalâ—to the slope of these mountains which created another sign of ruler presence—the mansion and garden complex of Khusrau-âwâ—and attracted other activities along



**Figure 4:** First phase of quarter formation. Source: Alizadeh and Habibi (2008).



**Figure 5:** The concepts of point and line in the city of Sanandaj which is in line with the place of power and its movement in the course of time.

Sources: adapted from Ardalan and Bakhtiar (1973).

the line (Figures 3, 5). This line, as a continuous part of city's principal route, also formed the Qatâr-chyân linear bazaarché (Figure 3). This means that the creation of the line was mainly bound up with the power relation focused on the Wâli.

This part (southern part of the river) was called *Mahalla-ye Daré* (Rangavary, 1999). This, alongside the northern part, formed the first settlements present on the site of the city prior to its foundation in 1639.

In addition to these points, other social and economic forces were also identified. These forces were in line with the roles of two families; first the Wakil family<sup>9</sup> and second the Galadâri family<sup>10</sup> in the formation and development of the quarter towards the southeast and northwest.

Due to a conflict<sup>11</sup> with Wali Ardalan, the Wakil family had to move from the ruling family quarters to the flat part of Qatâr-chyân quarter on the southern side. This movement formed the second phase of the quarter's development (Figure 6); to some extent, the place where they settled defined the southern boundary of the quarter and acted as a point of gravity to attract more people to settle there. In addition, their location attracted some other important families, most notably the Babans<sup>12</sup> family, and their mansion became a point of reference for the structure of a second center of the quarter called Wakil's Bazaarché.

Considering the main profession of the residents and close proximity of the quarter to the slope of the Âwear Mountains<sup>13</sup>, the next force of quarter development can be linked to the role of the Galadâri family<sup>14</sup> in attracting more people to the quarter, particularly to the west and northwest of the quarter (Figure 7).

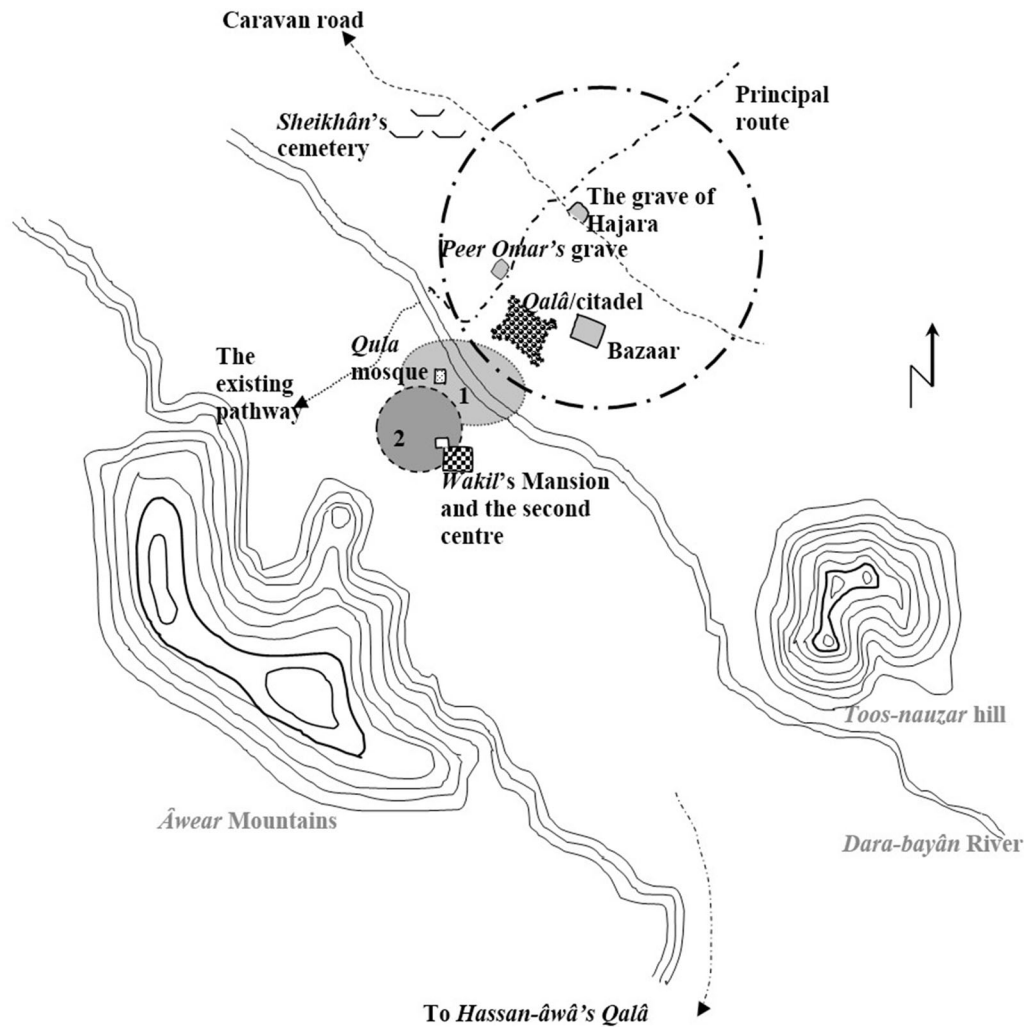
Another important structuring element was the slope of the Dara-bayân River, which divided the

city into two separated parts. This can be recognized as the natural transverse line of the city. Apart from its role in bordering and defining the quarter of Qatâr-chyân, it affected the houses orientation on the slope towards the north and maintained the spatial element of bar-haiwâns (semi-opened veranda) in the structure of houses (Figure 8). This can be recognized as a striking feature of the settlements in the Zâgros mountain range, "where a view of the country for miles around can be obtained", and, thus, became an important element in Kurdish culture which transferred to the urban settlements of the region as well.

### Administrative Structure

Before dealing with the social principles of the quarter, it is better to examine the city's administrative structure which, to some extent, can shed light on the decision-making process across the whole city and the quarter under investigation. In comparison with other Islamic cities, where the main inducement of the concept of self-regulating social affairs across the quarters was recognized in line with Sharia law and the sayings of the prophet (Lapidus, 1967; Bianca, 2000), here, in a Kurdish city, these two factors acted more as catalysts to evoke the sense of solidarity among the people because this sense was mainly formed by the circumstances surrounding this society for a long time even prior to the rise of Islam.

The nature of administration in the city was essentially personal, rather than institutional, and, to some extent, distinguishable from other Iranian cities. "Its inhabitants did enjoy a substantial degree of internal self-government, if, by that



**Figure 6:** The second phase of quarter development concerning the Wakil's family movement from the nobles' quarter.  
 Sources: Alizadeh and Habibi (2008).

term, is understood the day-to-day regulation of the city by its own indigenous [agents], rather than by external ones". The evidence from local chronicles suggests that the city administration, apart from the dominant role of Wâli<sup>15</sup>, was based on four pillars (Figure 9). These pillars were defined as the realms of the four families in charge of the main offices of power in the structure of Ardalân government.

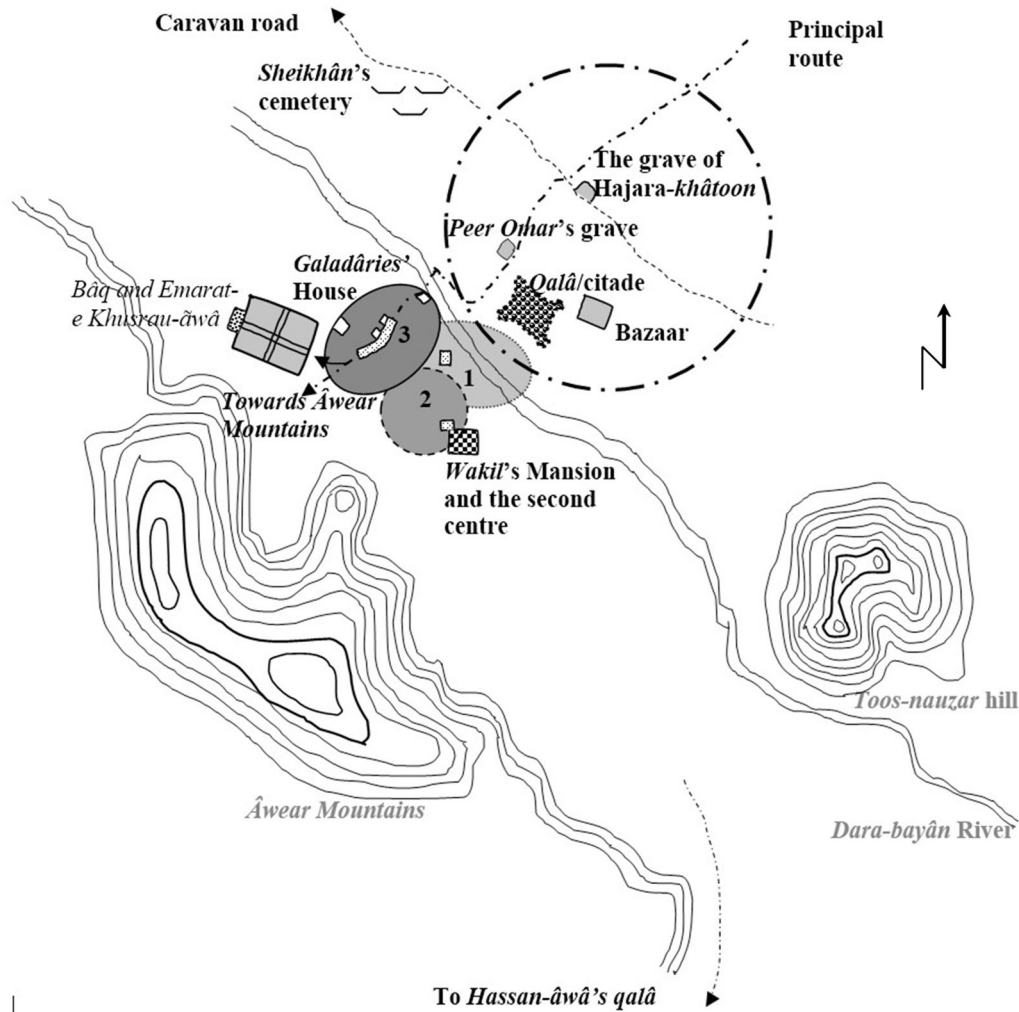
Apart from these pillars, other subdivisions of that structure are seldom mentioned in the local chronicles. This is also true for the administration system in the quarters. The only exceptions are the names specified for a mosque (mosque of Dârughâ)<sup>16</sup> close to the main bazaar and an alley (Kuché Dârughâ) in the Qatâr-chyân quarter where the Qula mosque is located. In addition, when Rangavary<sup>17</sup> is talking about Reza-khân's

arrival in the city<sup>18</sup>, he mentions the name of Kadkhudâ<sup>19</sup>.

Due to the lack of information, it is impossible to discuss the issue of city administration any further. As explained, the only information acquired for the quarter is that the quarter had an official with the title of Kadkhudâ. There is no information concerning his relationship with the Dârughâ and the people of the quarter as well. In this regard, Sheikh Ebrâhim<sup>20</sup> mentions the name of Kadkhudâ Kûlé in the Qatâr-chyân quarter, who was appointed by the government.

"What I remember is that he [Kadkhudâ Kûlé] usually proclaimed across the quarter at night using this citation: be careful, something was stolen in the quarter of ... please keep your doors closed".





**Figure 7:** The third phase of quarter development is concerning the Galadâries' family function and the course of the principal route towards the Awear Mountains and the mansion of Khusrâu-âwâ (second place of Wali).  
Source: Alizadeh and Habibi (2008).

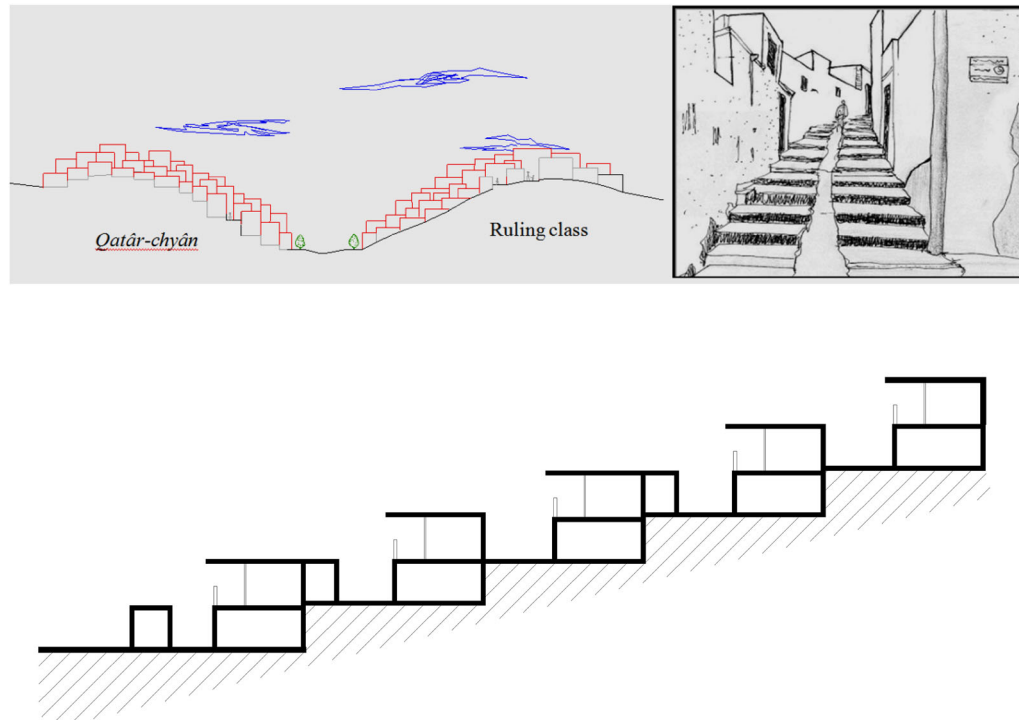
He refers to the Dârughâ's function associated with the bazaar; "the bazaar's gates were opened only in the presence of the Dârughâ". This point is in line with the view of Lambton (2011, p. 610) who said that "in 13th/19th century the functions of Dârughâ tended to be confined to the bazaar".

Considering the above facts, it can be concluded that the relatively official status was mainly in line with the presence of Kadkhudâ as a mediator between the government and the people, and in so doing regulating the security of the quarter at night. There is no other information explaining his function concerns with other affairs of the quarter. For this reason, in the absence of external interference, other informal agents were engaged in regulating the quarter's affairs, namely the Ulamâ

and Rish-séfîdân (elders), which can be defined as an internal self-government structure.

"I have never seen or heard (from my father) any particular conflict between our neighbors concerning building activities. We lived as an extended family within which any other minor problems were usually solved by the manner of Kadkhudâ-manishi"<sup>21</sup> (Khurshid-laqa Abubakri)<sup>22</sup>.

"As the concept of neighboring was so strong in the past life of the quarter, I do not remember any conflict which was solved by external agents [governmental ones]. They usually knew each other and lived as close relatives [sister and brother]; therefore,



**Figure 8:** Typical section of the settlements in the slope of Dara-bayân (the valley of Bayân) as the natural structuring element of the quarter. This natural feature contextualized the form of terraced houses.

it was easy for them to manage their affairs”  
(Hairatsajadi)<sup>23</sup>.

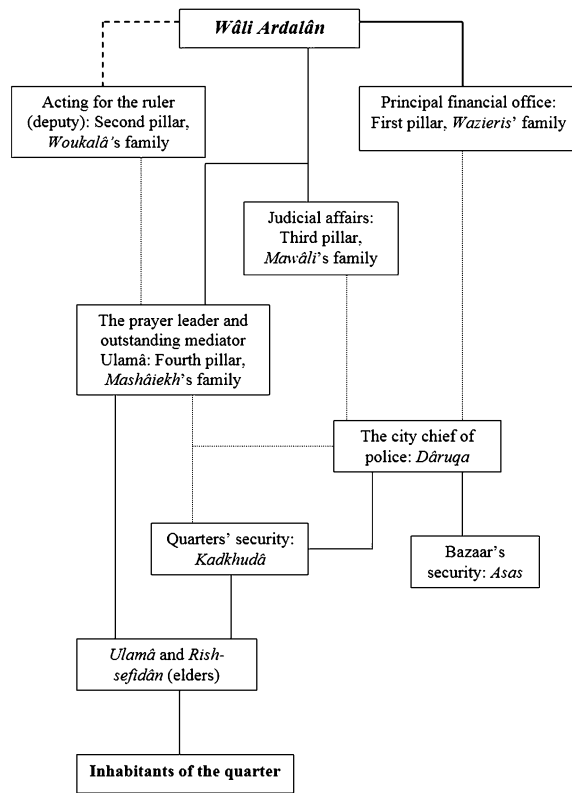
In these quotations, we can see how the people regulated their affairs without recourse to more formal institutions. From this perspective, they first solved their problems internally by reference to the elders, the mosque’s Imam or ultimately to the *Ulamâ*<sup>24</sup> of the quarter. Consequently, this point supports the notion of Rapoport (1977, p. 257); “where neighboring is important, different forms of [internal] cooperation may emerge than in areas where membership in formal organizations is a substitute”.

### Social Principles: Public Domain

For social principles concerning Kurdish habits and traditions to conceptualize the Kurds’ understanding of their environment, the quarter’s public domain has been investigated. For this, two main public elements were characterized as influencing the social life of Kurdish people: religious elements in relation to the function of the mosque, and the secular element of the *Mewân-khâna*—a guest house, where guests were entertained—as peculiar

to the Kurdish context (Figure 10). The first element was seen as, in a sense, being analogous to other Islamic cities where it acted as a place for the daily gathering for adults and young men within the structure of the quarter. In light of this, accessibility was an important point so that the mosques were mostly located at the merging points or along the routes and in some cases its courtyard became a part of the circulation system of the quarter accessible in a short walking distance from the houses. This established a daily gathering and regular communication which strengthened the sense of neighborhood, mutual responsibility and social cohesion among the inhabitants. This, together with the houses of leading *Ulamâ* (religious leaders), a place of knowledge to resolve problems and disputes among the inhabitants, and *Rish-séfidân*/elders led to a substantial degree of internal self-governing without more recourse to external regulatory agents. “This ultimately will ensure the equitable equilibrium<sup>25</sup> of the built environment during the process of change and growth” (Hakim, 2008, p. 24). For the first element, the words of Sheikh-Abraham<sup>26</sup> can be considered:

“During each daily prayer, the mosque of *Tubâ-khânoum*<sup>27</sup> was crowded by the young



**Figure 9:** The administration structure of *Ardalâns* government. (1) An authorized link based on the local chronicles. (2) Possibility of link due to the general trend of the sub-categories and a possibility of congruence among them.

and adults of the quarter. On those great occasions, the unity of the people was to such an extent that if somebody was absent we usually asked somebody to call on him in his house and check the reason. We were usually used to see and being aware of each other's in the daily prayers. Apart from this, we usually had a discussion about the affairs of the quarter. For example, if somebody had a problem with his close neighbor, we discussed it and tried to solve the problem by recommendation of the Imam or other elders of the quarter".

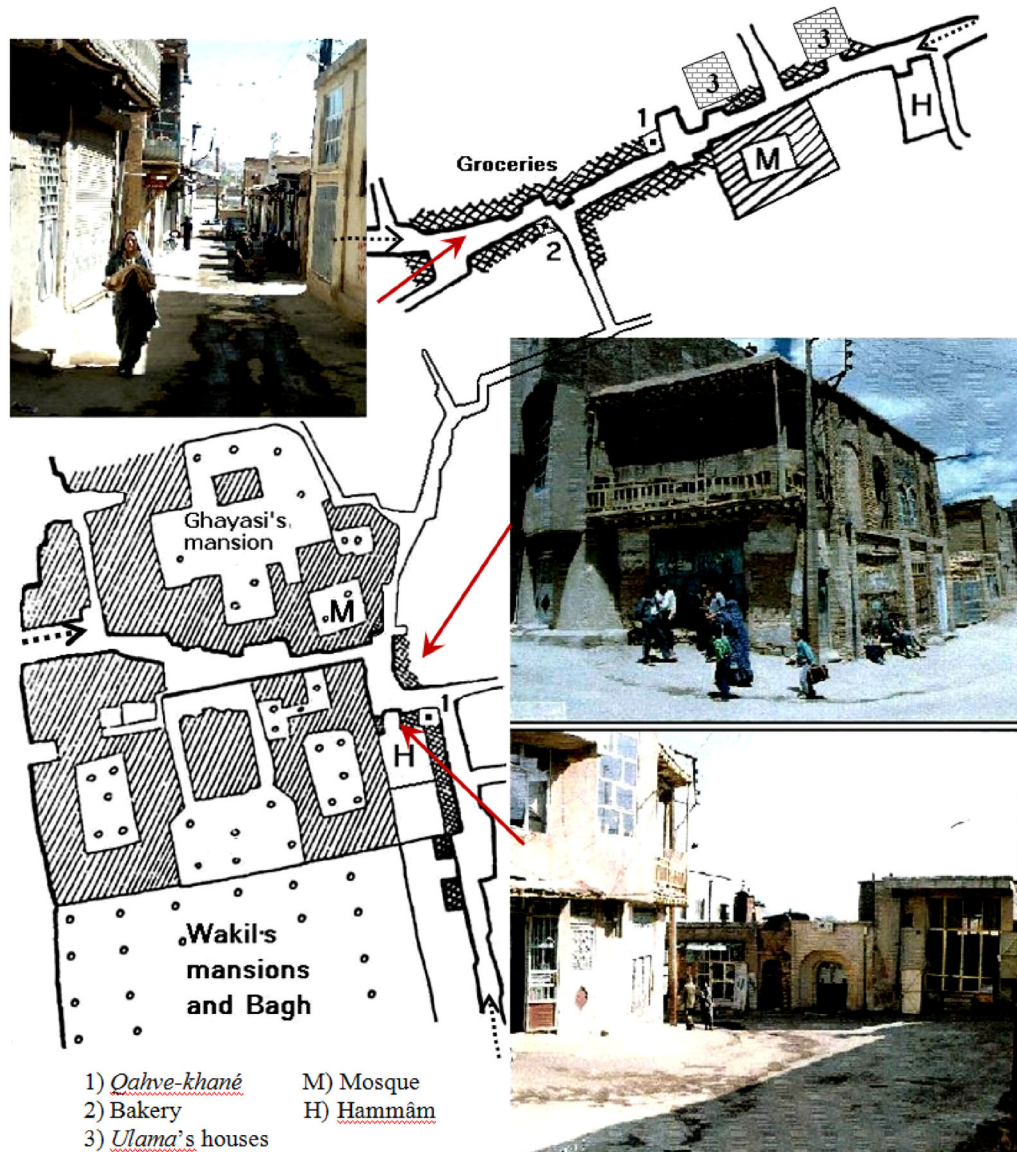
The second element, the *Mewân-khâna*, was identified as a central institutional element in the evolution and transmission of Kurdish habits and traditions;

"Information reaching the community would be discussed in such gatherings, [*Mewân-khâna*], and, to some extent, assimilated to the communal culture" (Kreyenbroek, 1996, p. 105).

It is a social element which conveys the hospitable character of Kurdish society. Within the case study, traces of this element identified in the character of *Qahvé-khané* (coffee house) where, similar to the *Mewân-khâna*, the adults and young men spent their leisure time drinking tea, talking about the events of the day or listening to the narrative of a storyteller<sup>28</sup> and, thus, the young were taught traditions and etiquette. The importance of this social element, stemming from the concept of the *Mewân-khâna*, was such that two centers of the quarter were predominantly characterized by the presence of the element of *Qahvé-khané* alongside the religious elements of mosque and *Hammâm* (public bath; Figure 10). As Ayazi (1992) states, the *Wakil's Bazaarché Qahvé-khané* was mainly used by young people and *Pahlavânân* (champions). For this reason, the *Wakil's Bazaarché* can be distinguished from the linear *Bazaarché* due to the lack of *Ulamâ's* houses there which made it more appropriate for secular than spiritual activities (Figure 10).

Following the above men's social realm, the women's social realm was explored, first by examining the concept of privacy in Kurdish culture. This was mitigated by the nature of Kurdish culture which had evolved within the *Zâgros Mountains* where the geo-physical setting and the rich colors of the landscape with its long unstable history gave rise to distinctive traditions and habits (Izady, 1992), namely a strong sense of social attachment and of hospitality. As a result and unlike other Islamic cities, the tension between two realms, the strict boundary between the public and private domains, was somewhat reduced so that the women could negotiate with public spaces of the quarter—thoroughfares, two centers of the quarter and doorsteps either within the public spaces of thoroughfares or semi-public domain of a *Bunbast* (dead end) or a *Maindânehé* (small square among close neighbors; Figure 12). The primary relationships occurred within the quarter "where there [was] very little privacy and anonymity" (Rapoport, 1977, p. 297) due to the homogeneity of inhabitants and strong sense of social attachment among them. The effects of such social ties and attitudes to privacy were considered with respect to the nature of interaction between the two realms so that the indigenous houses were characterized as extroverted structures intimate with the world of *Kuché* (alley) by means of spatial element of *Bar-haiwân* (open veranda) and openings overlooking the public domain (Figure 11)





**Figure 10:** The *Qatâr-chyân Bazaarché* and its relation with the secondary centre, *Wakil's Bazaarché*.  
 Source: author August 2003. These two centres were the focal points of activities in the quarter where anyone could be there freely.

and even a neighbor's house, and courtyards which open directly to the *Kuché* (Figures 17, 18). Generally speaking, it means that the harmful notion of overlooking evident in other Islamic cities was not as strong in the Kurdish context.

Apart from examining the nature of life within the quarter and some particular points concerning the status of Kurdish women, further information on women's social realm was examined by considering five gathering places for women in the selected quarter, the Hammâm, cemeteries, shrines and tombs of saints, *Kâni/springs* and *Bar-mâl/doorstep*. Of the gathering places, the *Kâni*

and the *Bar-mâl* are somewhat peculiar to the Kurdish culture and were the greatest locations of women's social interaction. Their impacts on the organization of space were in relation to gathering places close to the *Kâni* and the route of women's journeys to those places and, more importantly, to the element of *Maidânché* in front of cluster houses as an important place of women gathering while their children played freely. Due to special role of *Bar-mâl* gathering in social life of Kurdish women, it is still evident in various parts of the quarter among commoners (Figure 12). This is mainly important if we consider many socio-





**Figure 11:** Intimacy of houses within the realm of public spaces.

spatial changes that happened since the period of modernization in Iran. Based on the results of fieldwork, two further attitudes were also identified regarding the concept of Bar-mâl. It was recognized as a desirable attitude for commoners due to their strong sense of social attachment, social cohesion and the spatial pattern of their settlements. But this was disregarded by wealthy and Ulama families due to their status, values and life styles and the spatial pattern of their houses which allowed such gathering within the private instead of public realm.

### Spatial Principles

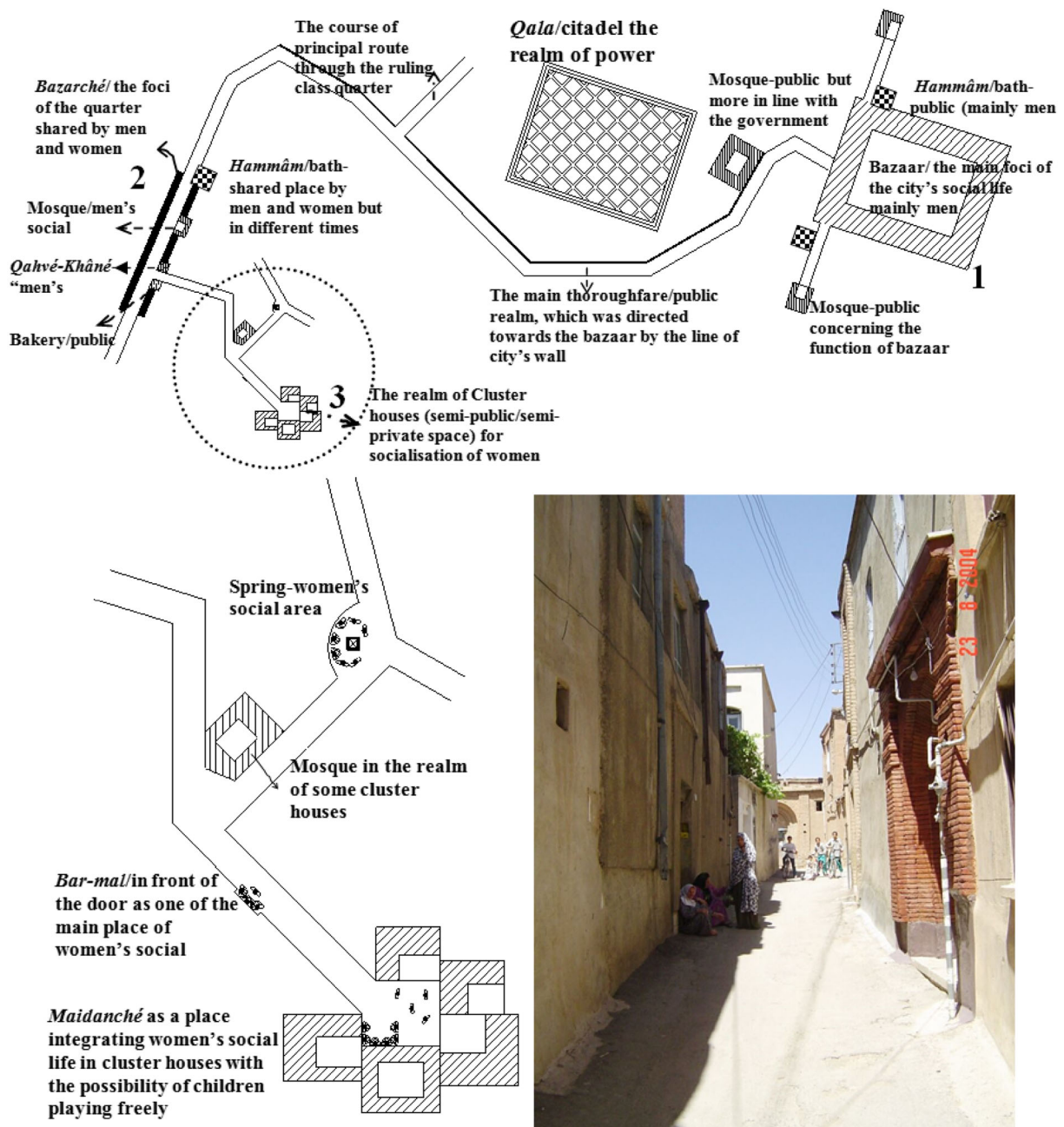
The spatial features of the quarter were first examined through its street pattern, which comprised a hierarchical system of networks leading from the principal route, the hub of social interaction of the quarter, to the primary Kuchés, to the secondary Kuchés, and finally to the Bunbast or the Maindâncché (Figure 13). These last two provide access to the cluster houses where the women's social life is seen and happens. In this section, the rationality of the urban form can be emphasized to support the view that quality in human settlements lies in the richness of contrasting situations not in gridiron urban forms defined by modernist opinions. From this point, the urban form of the quarter can be conceptualized as a result of tension between geometric and organic forms which defined binarism in the evolution of the city.

The last section on spatial features deals with the experiential qualities of physical space in the circulation system of the quarter with respect to the features of terrain and social organization of the quarter. The spatial qualities of the Qatâr-chyân

quarter shows two important lessons concerning the duality of space rooted in the social structure of the quarter, poor and rich living alongside each other and the characteristics of the terrain, which can be conceptualized as the synthetic order of place, overlapping of views, or the terraced pattern of houses. This way of space configuration is in contrast with other Iranian cities located in the central plateau, where a carpet pattern of built form is dominant so that everything was reduced to surfaces and lines (Figure 14).

The duality of space configuration is mainly in relation to the existence of two attitudes towards visual privacy among inhabitants of the quarter which is evident in the different features of the built form alongside public spaces—thoroughfares. The houses of rich and notable families usually include an introverted structure similar to the concept of courtyard pattern in other Iranian cities. But in the houses of commoners, a kind of extroverted structure rooted from indigenous architecture of the settlements in the region was maintained. In this type of house, the feature of Bar-haiwân in contrast to its counterpart of Eyvân in other Iranian cities is an important transitional space between the inside and outside world. Apart from socio-cultural explanations, this is also due to visual qualities of surrounding natural landscape which include such spatial elements even in the houses of higher-status families to keep direct view of the country for miles around (Figure 11).

Apart from above features, the house entrance doors show particular patterns in which the entrances were exposed to the view of passersby in the quarter circulation system (Figure 15). Apart from a point concerning the harmful view of a passerby into the houses (Hakim, 1986), this enriched the visual qualities of public



**Figure 12:** Men and women social realms in the *Qatâr-chyân* quarter.

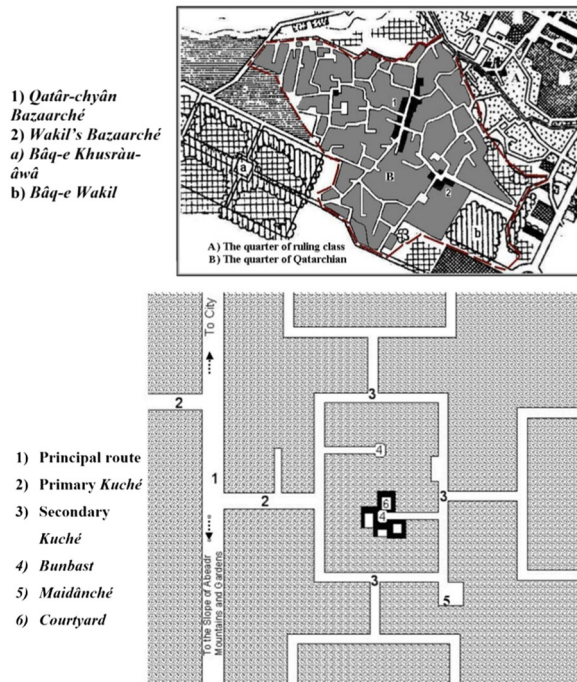
*Source:* Alizadeh (2007). The hierarchical movement from the main bazaar to the cluster houses as the main domain of women's social life: (1) the bazaar complex is mainly in the domain of men's social life, (2) the *Bazarché* as the shared domain, (3) cluster houses which contained the elements of *Maidânché*, spring and possibility of gathering by the door step (*Bar-mâl*) are mainly the domain of women's social interaction.

thoroughfares. In addition to this, due to the social structure of the quarter where rich and poor are living side by side together, different images of entry spaces—the last spatial element approaching the private domain—with a diversity of scale and portal decoration created and enhanced visual qualities of the quarter circulation network (Figure 15).

## Private Domain

Considering these words from Rapoport; "the way the external order is developed depends on what happens in internal spaces and vice versa" (Rapoport, 1977, p. 309), the last part of analysis deals with private domain within the cluster houses as



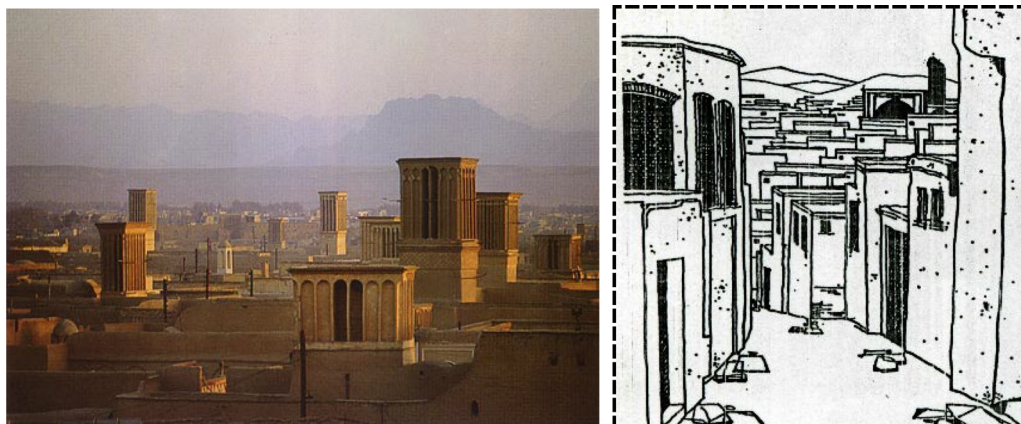


**Figure 13:** The street system of the quarter and its model. Sources: right from Alten (1958). (1) The principal route acts as a backbone in merging the stream of pedestrians from other thoroughfares in a relatively hierarchical pattern.

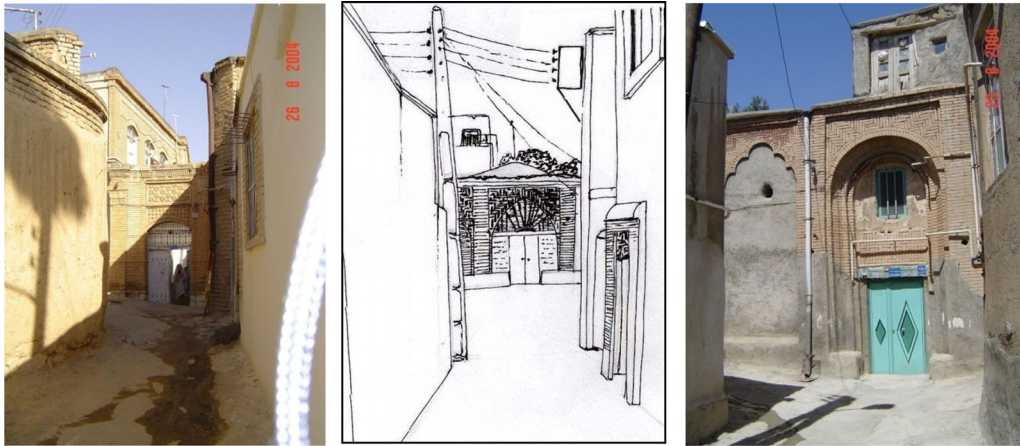
the primary setting of family life. Within this section, the analysis focused on the form of connection between two realms of community based on perceived socio-spatial characteristics. In this regard, two patterns of connection were identified: one with an introverted spatial structure recognized in line with life of higher-status families and analogous to spatial structure of houses in other Iranian cities within the central

plateau; and second, with an extroverted structure which includes the life of commoners and, in turn, defines the indigenous architecture of the region. The first group of houses was usually typified by a large entry space beside the public thoroughfare referred to as Nema-hashti (a semi-polygonal uncovered space). This is a transitional spatial element between two realms linked to the Haush/courtyard, the hub of social life, through complicated hierarchy of spatial elements involving a second stopping point (Hashti) and blind corridor. This can be linked to the concept of visual privacy as one of the main architectural principles in Islamic belief (Moradi and Amirkabirian, 2001) which restricts the ease of communications between inside-outside worlds (Figure 16).

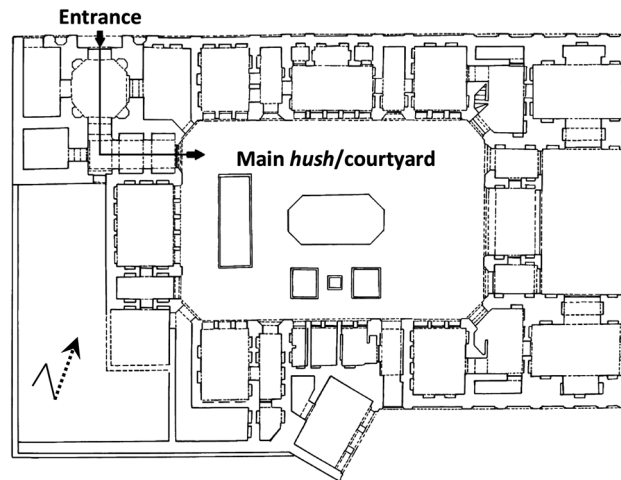
In contrast, within the second group of houses, the size of the Nema-hashti was either minimized or omitted from its structure depending on the wealth of the owner. Thus, the Haush was directly linked to the Kuché due to the lack of this buffer zone (Figure 17) which facilitated easy communications between the neighbors and strengthened more social ties and attachment among them. This can be linked to the intimacy and hospitality required by Kurdish culture to visitors among the commoners. For example, as Barth indicated, "hospitality is an integral aspect of the Kurdish ideal of a man, conversely, a person with a reputation for miserliness suffers corresponding loss of prestige" (Barth, 1953, p. 109). This is also what impressed Rich in his first contact with the Kurds in 1820. For him, 'the manners and customs of the Kurds [are] unlooked-for honor, and [are] great proof of his friendly and



**Figure 14:** Comparing two built forms from the point of the site's potential as form giver. Left: city of Yazd from <http://www.iranchamber.com/cities/yazd/yazd.php>. Right: city of Sanandaj from Bahrami (2001, p. 25).



**Figure 15:** Diversity of scale and portal decoration which created and enhanced visual qualities of the quarter circulation network, drawing from Yusefzamani *et al* (2003).



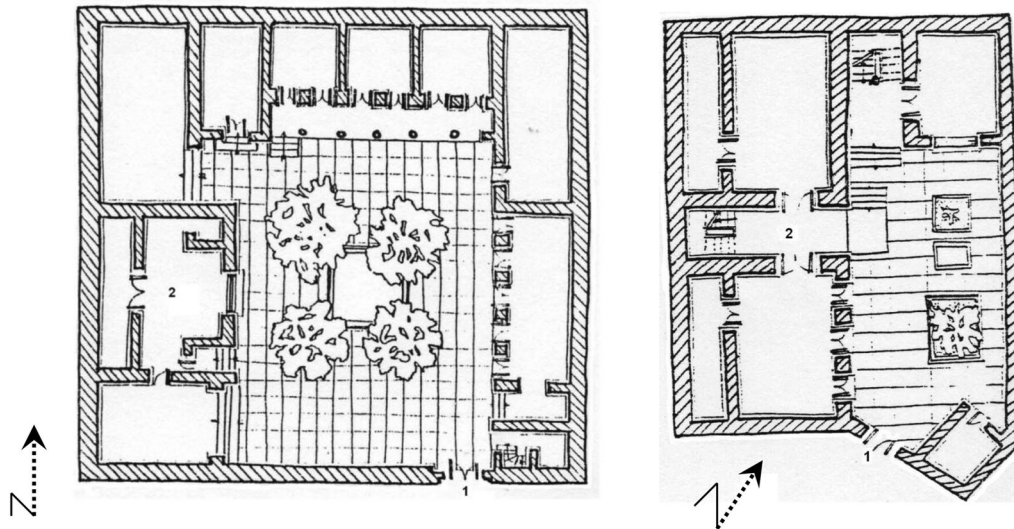
**Figure 16:** Complicated forms of entry into the private domain in the houses of higher-status families (Wakil Famili).  
*Sources:* Sâzmân-e Mirâs-e Kurdistan.

hospitable disposition' (Rich, 1836, p. 70). Regarding this point, the result of existing built form observation and interviews with some elderly people indicate that entrance doors were usually left open during the day for the sake of offering welcome to any guests<sup>29</sup> and of easy relationships among the neighbors (Figure 18). In this regard, Haqshenas (1999), who recounted his life history in poetry and was one of the interviewees of the research, wrote that, there was a great trust among the neighbors, so much so that the gates of their houses were often open for their easy socializing. This means a great sense of collaboration and togetherness which 'responded to the lack of adequate laws and regulations for the security of its inhabitants' (Sultanzadeh, 1989, p. 369).

In contrast to the first group of houses and what Memarian and Brown (2003) indicate in relation to the form of houses in Yazd and Shiraz, the second group are more intimately connected to the public world, especially to close neighbors as they had two-stories with the possibility of a direct, outward looking contact with the world of the kuché (public; Figures 18, 19).

Comparing the plans of these two types reveal a basic plan of houses which usually comprises a tripartite structure, called Se-bakhshi by the people. The basic spatial structure of this plan comprises a Bar-haiwân in front of the main living room flanked by two rooms (Figure 20). Bar-haiwân usually gives access to other living spaces. The main point of difference is concerning their





**Figure 17:** The second type of house belongs to commoners.

Sources: Saravand (1992). The plans indicate the simple pattern of organisation and their relationships with the public realm. Both plans were adopted based on climatic conditions of the region so that the main parts are on the west and north sides of the plots. (1) Entrance door, (2) Main parts of the house.



**Figure 18:** Intimacy of the second group of houses within the realm of public spaces.

Sources: author August 2003/4, This implies a great deal of social cohesion among neighbours.

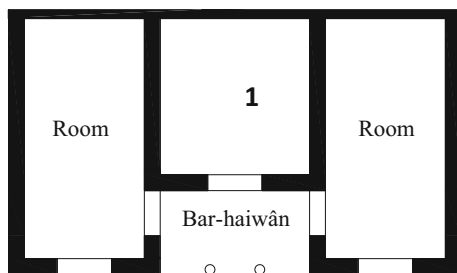
relationship to the realm of public domain regarding the concept of privacy. In other Iranian cities particularly those located in the central plateau, this balconied window was introverted and "the internal spaces of the building being connected to the outside by an internal courtyard in the center of the building" (Pirnia, 1990 quoted in Sadoughianzadeh, 2013, p. 4). In such houses, the internal spaces of a house or building have very limited contact with the external ones (Memarian and Brown, 2003). In contrast, in the case of Qatâr-chyân in Sanandaj, the extroverted structure of houses is characterized by a more

open spatial layout to the realm of public spaces, and the Bar-haiwân was set back to define a transitional space, as a softer barrier and welcoming space, to negotiate with the outside world (Figure 11).

The origin of this basic plan can be traced in the farmhouses of the countryside, especially in the villages to the south and southwest of Sanandaj, where the slope gave direction and structure so that the roof of one house acts as the courtyard of other house and the throughway of the settlements; thus, it was appropriate for them to keep a broad view of distant scenery.



**Figure 19:** Summary map concerning the points of differences in the two groups of houses and their presence in the realm of kuché, (a) first group of houses, (b) second group of houses.  
 Sources: Kurdistan housing and urban planning organization, Sâzmân-e Mirâs-e Kurdistan, Tadbier-shahr's consulting engineers.



**Figure 20:** The basic plan of house design. Depending on the status of the owner, the main part (1) can be changed. In higher status homes, it was normally used as the main part of the house (guest room) consisting of a living room or sash-window room (*Otâghi orsi*) overlooking the courtyard or *bar-haiwân* in front. In the lower status homes, it is either a main living room or it was squeezed into a corridor (usually with a closet at the back) to link two surrounding rooms.

## Conclusion and Recommendations

“Emphasising the values embodied in traditional cities does not automatically imply rejecting evolutionary forms of changes, nor does it mean that all traditional structures should be conserved at any cost. But it does suggest that certain essential structuring principles can be revived, adapted, and perpetuated to the advantage of contemporary societies” (Bianca, 2000, p. 330).

We have seen from the material in this study how traditional urban form located within the majestic Zâgros mountain range in the west of Iran, the birth place of Kurdish culture, displays individual



uniqueness in their built form qualities and overall physical attributes, including a strong sense of place. It became clear that the main driving force behind its formation was in relation to the challenges of two empires in the 17th century<sup>30</sup>. Also, the concept of mound cities was conceptualised not only as a background to the city's emergence, but also as a leading structure borrowed from a pre-Islamic concept, a typical style of urban planning among the civilised people living in the Zâgros–Taurus mountain ranges (Izady, 1992). The recalling of this concept, as a leading structure of Kurdish cities, led to the emergence of a unique structure in the foundation of the city that no other Iranian cities possessed in the periods of the Safavid (1502–1736) and Qajâr (1794–1925) dynasties. It also highlighted the quarter's evolution was mainly influenced by the two concepts of point and line bound up with the power relation focused on the Wâli. Other forces were identified in line with social forces initiated by the role of two Wakil and Galadâri families.

The administrative system of the city and quarter was examined as a bridge to approach spatial features of the quarter's built form. Within this section, four main pillars of the Ardalân government were identified in connection with four powerful families who dealt with different socio-economic aspects of that government. Apart from these pillars and the positions of Dârughâ and Kadkhudâ, the local chronicles and other sources did not show sufficient evidences to make clear any further the sub-divisions of these administrative pillars. The status of Dârughâ was identified as mostly dealing with the function of the bazaar, and the Kadkhudâ with the security of the quarter at night. In the absence of external agents, therefore, the quarter's affairs were regulated by internal cooperation managed by informal agents, namely the Ulamâ and the Rish-séfîdân/elders, in a context of perceived homogeneity rooted mainly in the professional affiliation among the inhabitants and sense of community and neighbourhood it nurtured. This can be recognised as a self-reliant character in the administrative structure of the quarter which shows how decisions were made from the bottom up, by those who experienced the place, sustained the society without recourse to external agencies. This means that the local communities in contemporary society can be empowered to nurture their own development plans and strategies from within and "overcome the division between subject and object" (Bianca, 2000, p. 337)

or what Akbar (1988) recognised as the shift of responsibility from residents to the state in modern techniques of planning which created the crisis in the contemporary built environment of Muslim cities. Hence, urban management has to be shifted away from a state-centred perspective to a form of urban governance which has "its focus on the nature of the relationship between different actors in the urban area" (Corubolo, 1998, p. 14) and mediates among them on the basis of conviction and of responsibility.

In addition, as the research identified the process of city formation, its overall structure and the course of the principal route as the backbone of the city, these findings can be seen as a background for further research in particular concern for the city's conservation plan. In respect to the structuring elements of the quarter and the principal route, some principles were identified in relation to the concept of center rooted in the notion of line and point. Where a number of socio-spatial factors are involved, the concept of center emerged in a linear form and where it was bound up with only one factor, the center took a concentrated form.

The next most important point is in relation to the concept of mound cities conceptualised as the Kurdish style of urban planning and the fact that Kurdish culture has strong responsiveness to the Genius Loci, to the setting of the city as a whole and to the dwellings in a particular relationship to the landscape. This concept can be recognised as a symbolic value of Kurdish culture inherited from pre-Islamic times which can work as a counterpart of the mountain in the macro-scale. From this point, it is the responsibility of urban designers to reconcile this concept with the contemporary urban architecture of the city. New developments of the city in the low lands can take advantage of this concept, where possible, by putting the symbolic elements on the high points. Or, in laying out new suburbs, any changes of topography should capture the relationship perceived with the landscape. This means putting more emphasis on the terraced houses with the spatial element of Bar-haiwân as an easy way to deal with the settlements' setting. In the Zagros Mountains, contrary to the central Iranian plateau, the value of landscape is such that the designer does not need to design courtyard houses and simulate the natural landscape in the courtyard. The value of natural landscape, in itself, invites the designer to work with, and not against, the topography. This means structuring the form of terraced houses to



enable the dwellings to be opened up to the nature and to the public domain by use of the spatial element of a Bar-haiwân. More importantly, the value of the Bar-haiwân concept as a buffer zone between private and public domains enables the residents not to have to cover their windows, which, in turn, increases the number of eyes on the public domain to naturally monitor the public and one another. Thus, communities can enhance safety<sup>31</sup>.

Another principle can be identified in relation to the entrance door position along the circulation system of the quarter. The sceno-graphic approach to the street pattern, which exposed different forms of gateways to the passerby, can be considered as a rule for neighborhood design in order to enhance its visual qualities. This rule is particularly important where the low lands are targeted for the city's development and the view of the landscape is limited because of the flat terrain. From this point, the designers would have to avoid long straight streets to enable the plan to create more opportunities for a variety of the doorway images exposed to the sight of passersby, thus enhancing the experiential qualities of space in the neighborhood.

Following the above principles, the concept of the Maidâché, as a buffer zone between private and public domains within the cluster houses, can be recognised as another important principle which, on the one hand, can help to enhance the experiential qualities of space in the circulation system of new quarters and, on the other hand, to strengthen the sense of neighborhood and social relations among the inhabitants. This spatial concept entails 'face-to-face contact, proximity and a reciprocal relationship consistent with the concept of nearness which brings about neighborhood and increases opportunity for potential meetings (Kearns and Parkinson, 2001, p. 2104).

Flowing from the above principles, it can be claimed that the notion of social life in a Kurdish quarter is rather different from other Islamic cities due to the socio-cultural and environmental circumstances that have embraced this society and engendered a distinct notion of neighbourhood and strong social attachment among its members, and, thus, different attitudes to public life in respect to women's presence. These principles can be recognised as indigenous rules in the structure of the traditional core which can be used for the future prospect of the city and other cities as well.

## Notes

- 1 The meaning of any object consists in its relationships to other objects, that is, it consists in what the object gathers (Norberg-Schulz, 1980, p. 166).
- 2 Phrasing study objectives as questions is desirable in that it leads to more clearly focused discussion of the type of information needed (Bickman and Rog, 1998, p. 8).
- 3 As Plested (2001, p. 1) indicated, the word tradition was derived from the Latin "traditio, equivalent to the Greek paradosis". It means handing down "the inherited and complex evolution of things cultural, social, conventional, and institutional" by someone or something to someone or something from generation to generation, especially by word of mouth or by practice (Demetri Porphyrios quoted in Steil, 2002). This denotes the importance of tradition as "the heritage of the continued value or evolved existence of things and that it is not a static notion implying necessarily outdated past and therefore useless, as it was viewed in chronological terms by its modern usage, but it is dynamic and transmissible to subsequent times due to a process and the content of that which is transmitted." From these points, tradition is "the result of selected popular wisdom and of the intelligence and experiences of whole generations of craftsmen, artists and citizen. It is the most advanced form of collective intelligence yet devised by humanity" (Steil, 2002).
- 4 The "ritualistic and political importance of traditional environments far outweighed its economic function" (Sjoberg, 1960; Bergman and McKnight, 1993; Bianca, 2000), the behaviour of individuals (the main factors of an industrial city) and it was more bound to the physical environment of nature than the industrial city.
- 5 The original text of this book was written in 1891.
- 6 Its original text was transcribed in 1862.
- 7 It was originally written in 1597.
- 8 Zalm as a winter qalâ, Marivân during the autumn, Pâlangân during the spring and Hasan-âwâ as summer qalâ and the main centre for Ardalân government close to the site of Sanandaj (seven kilometres away from its centre).
- 9 One of the notable families which was driven out of the inner shâr (Internal part: the fortified quarter of Khans/ ruling class) to the quarter of Qatâr-chyân due to a conflict with Ardalan's family (Wali of Sanandaj).
- 10 Cattlemen and muleteers whose business was connected with the function of city's main bazaar.
- 11 The Wakil family was deputy to the Ardalans' government till 1750 (Mardukh, 2000). A conflict occurred when a war took place between the Wali Ardalan and his opponents, Babans' family, in 1750. Since the Ardalâns were defeated in this wafr due to the failures of Abrâhim bag-e Wakil (the head of Wakils' family), this family was deprived of its position as deputy to the Ardalâns. More importantly, this pushed the Wakil's family to leave the nobles' quarter.
- 12 The Bâbâns' family ruled other parts of Kurdistan in the Iraqi region under the control of the Ottoman Empire. A few of this family migrated to the city of Sanandaj due to political disputes among themselves and the Ottoman's sultan.
- 13 The word *âwear* in itself means the source of water, the place where water originates from it.
- 14 The main profession of Galadâries' family was cattle herding. Over time, they gradually became engaged with the transport business associated with the function of the





- bazaar as muleteers. "I remember the time that the *Kuchéha-ye Mahalla* (quarter's alleys) were crowded each day at sunset with shepherds" (Sheikh Abraham's Interview, 17.09.2004).
- 15 Based on the idea of Lambton (2011, p. 608), the title of *Wâli* was the provincial governor in the structure of power, especially "after the emergence of semi-independent dynasties in the 3rd–4th/9th–10th centuries".
  - 16 "The superintendent of the markets, who was in fact the city chief of police to regulate all disputes and matters of Bazaar, to watch over weights and measures, and be answerable for order, cleanliness, and regularity".
  - 17 Tape-recorded interview in 1999: "the quarter's Kadkhudâ were invited to the assembly in the honor of Reza-khan on the site of Kalakajâr" [a site close to the Qatâr-chyân quarter].
  - 18 Reza Shah Pahlavi was the Shah of Iran from 15 December 1925 until he was forced to abdicate by the Anglo-Soviet invasion of Iran on 16 September 1941. The date of his arrival was not mentioned in the interview. However, it was the first time after his coronation (April 1926) that he visited the city of Sanandaj.
  - 19 The representative of the quarter and the spokesman on behalf of the citizens with the leaders.
  - 20 Interviewed (17.09.04).
  - 21 In this method of solving problems, one or two elders act(s) as mediator(s) between both diverging persons. They usually invite them for a meeting in which each explains their views and the third party or parties try to find the points of convergence which benefit both.
  - 22 Interviewed (15.08.2004).
  - 23 Interviewed (29.08.2004).
  - 24 Those recognized as scholars of the quarter namely Mardukh and Mujtahedi families.
  - 25 Equitable equilibrium is a term used here to imply that fairness and justice must always be maintained between the rights of proximate neighbors to achieve harmony and good will (Hakim, 2008, p. 24).
  - 26 Interviewed (17.06.2004).
  - 27 The central mosque of the quarter was located along the linear *Bazaarché*.
  - 28 As Ayazi (1992) and Haqshenas (1999) state, the quarter contained two active areas of Qahve-khâne within which adults and young people, even from other parts of the city, passed their leisure time drinking tea, and talking about the events of the day or listening to a recitation of the poems from the *Shah-Name*, especially the drama of Rustam and Suhrâb, by a story teller called Naqqâl or Morshéd.
  - 29 The Kurdish people are usually well-known for their hospitality among other Iranian people. This, together with the location of the Qatâr-chyân quarter, as it was separated from the city by Dara-bayân River, gave rise to a strong solidarity among its inhabitants, to such an extent that the majority of people still conceive their past based on the way of life in this quarter.
  - 30 The Sunni ideology located in the western part of the Zagros Mountain (the Ottoman Empire), and the extension of the Shiite religion to the eastern part of this mountains (the Safavid Empire).
  - 31 This can be recognized to be in line with the "natural surveillance" aspect of the crime prevention through environmental design (CPTED) approach.

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