

## Elements of Rural Residential Premises of Northern Iran and the Regulations Governing Their Layout

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**Abstract:** General aspects of the physical context of the villages in Guilan Province in northern Iran, with the distribution of the houses and servicing elements of the residential premises and also short fences with the distance between buildings, has displayed an open texture different from the central parts of Iran. In different parts of this province, the arrangement of spaces and service elements of rural housing seems to be with a great variety and sometimes lack of discipline. The question whether an especial order ruling on this arrangement and that which factors the layout depends on, is the issue that is discussed in this paper. In this article, at first, the geography of Guilan province was briefly reviewed and its residential premises examined. The results indicate that rural residential premises in Guilan province are affected by some factors such as: natural conditions (geography and climate), economic conditions (livelihoods and economic activities) and sociocultural conditions. Although, at first look it seems that the layout of rural residential premises elements are most affected by climate, but studies show that the provisions of this layout are most affected by sociocultural conditions and subsistence activities for women in Guilan are important elements of the cultural factors.

**Key words:** Aboriginal Housing in Guilan · Layout of premises · Principles of architecture · Rural architecture

### INTRODUCTION

In the villages of Guilan province which is a narrow range in the south of the Caspian Sea and north of the Alborz mountains, from the marginal areas of the sea to the highest mountains, we could see a variety of layout of residential premises and housing service elements. The point to which less attention has been paid so far is that: "Could we consider regulations governing the layout?" In fact, finding the regulations governing the residential premises layout is the main question in this paper. Certainly, rural housing, in the process of formation and seeking patterns, complies with the environmental conditions such as geography and climate, about which lots of researches have been made and several articles have been written. Besides, functioning of the housing and residential areas depends on the economic activity and the type of the livelihoods of the people and in the rural residential unit the impact of these two factors appears to have doubled; but the matter that cultural situations and social interactions could be one of the most important variables affecting the seeking pattern of rural area of

residence, is the assumption that we are seeking to prove or disprove the existence of.

**Geographical Zoning of Guilan:** As it is seen in the altitudinal zoning of Guilan (Figure 1), this province consists of three major areas: the mountains, foothills and plains. The width of the plains in the western part of Guilan is extremely narrow, but in the middle part it is of considerable breadth. Nevertheless, every cross sector of Guilan province has lands across the sea to the mountains. Because the water level of the Caspian Sea lower than the water level in open seas, the plains of Guilan in the lowest points are of the height of -28 meters. For this reason, the plains nearby foothills and the plains adjacent to the Caspian Sea have different geographic characteristics.

**Layout of the Elements of Residential Premises:** In Guilan the term home also refers to the whole residential area including residential building, spaces and agricultural facilities and other economic activities, fence and hedge, orchard and garden, water well, etc.

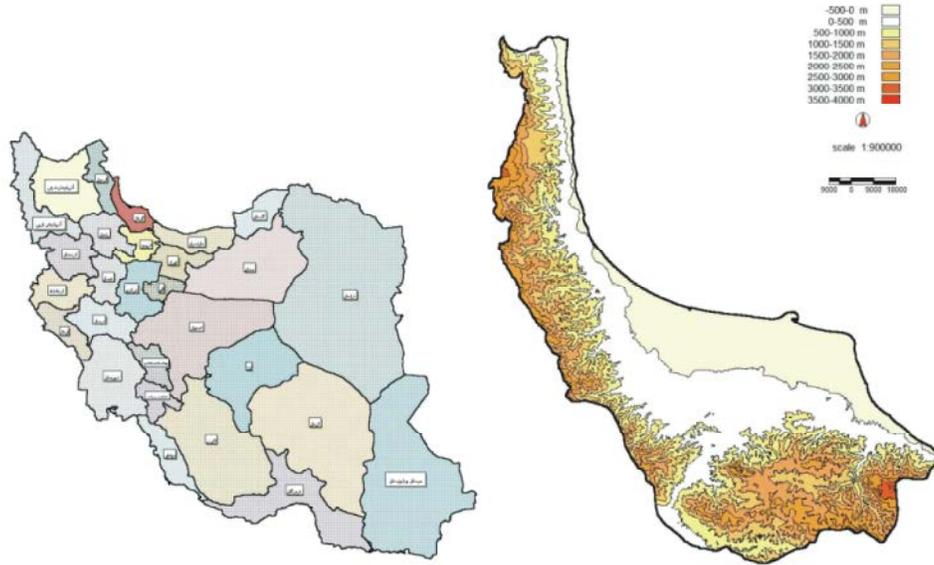


Fig. 1: lines of altitudinal levels of Gilan province. Source: Department of Planning and Budget of the province(Ref.:Mangement and planning organization of Gilan).



Fig. 2: Houses scattered in large areas in the plains of East Gilan, Dehsar Village.

This small unit satisfies all the needs of a rural household and has all the space requirements of them. Residential campus area varies in different parts of Gilan and even in one village. The term *desert* (Sahara) which refers to the yard in many areas of Gilan suggests that large scale residential parts are in Gilan (Figure 2).

**Physical Spaces and Service Diversity and Multiplicity:**

Based on the geographical location and climate and livelihood needs of rural residents in each region of Gilan some other service spaces and buildings are located in the residential area and near the house building such as: Barn and *Gacheh*, *Kandooj*, *Telambar*, *Kotam*, Yard (*Sahara*), Hedge and fence, Oven (*Tandor*), Stove (*Garmkhaneh*),

Smokehouse (*smoke room*), *Kaleh*, Poultry nest (Ducks' place, Hens' nest..

**Positioning of Rural Residential Architecture of Gilan:**

The main reasons for the formation of settlements of Gilan which are in the form of home-garden or home-farm are as the following:

- Need to take care of the farm or rice fields, especially against the ??wildlife of the area
- Easiness of the transportation of rice from the rice fields into the controllable premises and rice depot (*Kandooj*). Because time plays a crucial role during harvest as usual.

- High groundwater level, which provides access to water on any land.
- Presence of suitable soil in all plain areas of Guilan, which eliminates the limitation of the use of land suitable for cultivation.
- Relative safety in Guilan and lack of attacking and looting economical stores and as a result no need to defend against enemies.

The relation between the house and environment not only from the view point of influence but also from the viewpoint of the differentiation between them will be crucial; both are a focal point for the living, both encompass human life and both are containerized for residence [1]; but containing two different types of residence. Schultz [2] has divided the ways of residence into complex (collective) residence, public residence and private residence and states that settlement has always been the place in which collective residence has played the related role. Considering the private, public and collective residence, the understanding of the spaces of the vernacular architecture in Guilan is different from the other parts of Iran and this kind of understanding of space in the course of time, causes different understanding of place. Human understanding of space is the result of a combination of sensory data such as: sight, hearing, dynamic, smell and therma. People who grow in different cultures also live in different sensory worlds [3]; so environmental conditions in these areas following the influence on human senses, causes a different understanding of space.

In Guilan multifunctional architectural structures (poly functional spaces) are observed frequently. In examining these types of spaces and architectural elements we can say: Some aspects of space with fixed feature as far as human behavior isn't seen in it are not visible [3]. It means that the function of the space is the justifier of its identity. These spaces become places with different nature when conditions are different and their time-place operation has caused the possibility to integrate some spaces and operations. Most of the vernacular architecture structures in Guilan could be multifunctional. On the other hand, human being in addition to understanding the perspective of the space like the other animals understands and feels the distances. His understanding of space is dynamic, for it is related to the operation- That is what can be done in a certain space-not on what is seen with passive viewing [3]. For this reason it could be easily found that the function of architectural space has been instrumental in

understanding of it and although the multifunctional spaces have one structure, they create the sense of the existence of several spaces. This has led, as named the similar spaces, shall be based on location and not on the basis of detailed performance- like down-room (*Jir-otagh*) or balcony-room (*Talar-otagh*) instead of family sitting-room or guests-room; that the rooms at different times can be a receptive of different activities. In response to physical problems, knowing the people's understanding of space and the way they use their senses is needed.

**Characteristics of Physical Texture of Villages in Guilan:** By studying samples of residential premises in different parts of Guilan, the specifications of the dominated schema of the residential premises can be briefly explained as the following:

**Physical Characteristics:**

- The type of tissue in most villages in Guilan is *open texture*. The scattering of the residential areas among the fields and gardens has caused dissociation in the open texture. And inside the area, the residential house is located in the central part and is away from the four boundaries of the site. The building of the house is not only away from the present service buildings, but also keeps its distance with the service elements and the house in the adjoining residential segment.
- Service elements, in most cases, are constructed apart from the dwelling unit and with respect to the distance from it. In this arrangement, *the method of aggregation* is used; the building is attached to the enclosure and the other buildings.
- Despite the large area devoted to landscaping (especially in the plains), building area devoted to residential is small and the need for large spaces is ruled out.
- The entrance of the area and the house are apart and crossing a path in the yard to get home is general. *The entrance axis layout* is influenced by the main facade and entrance of the site. In lots of villages the passageway changes because of the entrance axis layout.
- Planting trees (especially deciduous trees), in front of the building and in the southern part of the courtyard is almost always observed. The trees have found religious and ritual aspects as well. *Lack of texture compression* in the villages is partly confirmed due to the existence of perennial plants.

- Contaminated areas such as bathrooms and space for livestock, toward the entrance, are located behind the main building and away from public view. *Lack of functional disturbance*, is observed in the absence of a continuous dense tissue.
- The entire village complex is considered the *habitation frame*. Residential spaces don't have rigid walls and the interface between residential components is short hedges or water stream or a series of trees. This type of privacy limitation is often a definition of the limits of the property and does not limit the visual communication.
- There is a maximum distance between the water wells and sewage wells so as to minimize the possibility of contamination. Complying the permissible distance towards the drainage wells of the adjacent houses, too, is an indicator of this element. In spite of the individual elements placed in the area, *no interruption in the tissue continuity* is sensible.

**Culture and Social Interactions:** Cultural characteristics of the Guilan province have emerged with significant differences compared to the rest of Iran. This can be on the one hand, due to the obvious differences in geography and climate; because the people of Guilan, who due to geographical conditions are mainly engaged in rice cultivation, for economic activities, need the work of all family members. In other words, the women of Guilan are responsible for the main steps of the process of sowing rice (Figure3). The women spending too much time working in the rice paddies and their working side by side with men outside the home has created a culture with distinctive appearance.

These considerations and beliefs rule out the complete confinement of the residential building as it is observed in central Iran and minimizes the hidden layers

of the building. This clearly expresses the effect of cultural factors on architecture and residential areas. Because before we could recognize and understand the houses belonged to a culture, we should touch and understand the true essence of the deep beliefs of a culture [1]. On the other hand, the need for constant monitoring of the enclosure to preserve the property and farmland requires close visual relationship between the inside and outside of the building. Do not forget that in the villages of Guilan, housing and farms have mostly been in the form of home- garden. These, along with the relative covering and veil of Guilani female who lives with it every day, completely justify the outward-oriented architecture.

In the architecture of Guilan, the transparent and porous spaces that are facing out though have been created to respond to the climatic and natural needs are at the same time, in perfect harmony with the religious needs and cultural beliefs of the people of this land. With this in mind, the culture of the people of Guilan could be described as extrovert like its architecture (Figure4).

About the Guilani men and women working in the fields, some scholars of sociology believe that "The important contributions that women are responsible for agricultural activities and the lack of separation of men and women in the residential space are too among the features of the traditional way of life in Guilan. *Undoubtedly, the general patterns applicable in Mediterranean and Middle Eastern civilizations, in which men and women, their public and private lives, craft work and domestic handicrafts and working in the fields, plains and wetlands in the gardens are in contrast; when we consider the division of roles between men and women in the society of Guilan, typically, they vary significantly.*



Fig. 3: lack of discrepancy between women's economic activity and the dominant culture of the community in the village of Vishka in the plain.



Fig. 4: The ubiquitous presence of women in public spaces of the village.

There are innumerable examples, confirming the status and particular position of women in the Caspian Sea coast [4-9]. This confirms that, the way of social interactions, which is influenced by the gender division of labor and labor relations in the dominant culture, is not only effective on the manner of economic activity, but complying with it, is also effective on the formation of residential premises.

### CONCLUSION

The geographical characteristics (Figure 5) depicts the main factors influencing the housing.

In Guilan zone, the residential areas apparently seem to lack discipline, but any area has components with different functions to meet the different needs of the households. Home and residential area contain a selection of some of the possibilities and limitations that the environment gives the human. But ultimately, the options for settlement patterns (in addition to the housing) are selected based on the socio - cultural characteristics.

Villages of Guilan, in most cases, have open texture which is influenced by climatic characteristics and livelihood activities of the people and in most cases are formed in the shape of home - garden or home – farm. Residential areas in villages have been created based on the aggregation of elements and integrated physical view is almost never seen. However, the principles that govern the integration are the open area in front of the house and opposite the main facade, with the contaminating elements and almost unpleasant spaces in the rear and side yards. As, the whole village is clear from the density and crowding body parts the need to overcome the

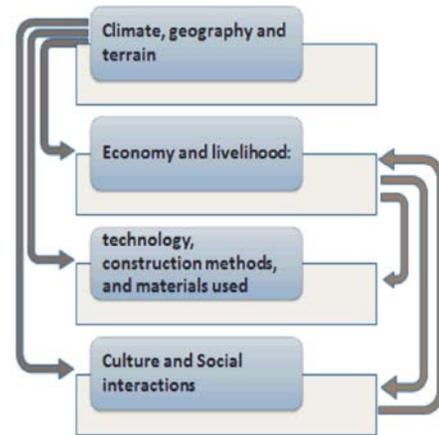


Fig. 5: The effects of the main factors influencing housing on each other

stresses of compression has been excluded and thus, a high per-capita basis isn't needed for the body of home. This is despite the high area allocated for residential areas and in other words, the superstructure to the site ratio is very low. One of the other features of the open texture of the villages of Guilan is the lack of Interruption of social interactions due to moving cars.

According to the studies performed, factors affecting the layout of the house include: geographical features, climate and terrain, economic features and environmental attributes of livelihood, culture and social interaction; and based on the impact of these factors, the layout of residential areas is subject to certain conditions of the region. Also, the periodic use of landscaping elements leads to the formation of some specific rules in the layout of the area, which was referred.

By observing the summary of the criteria governing the arrangement of residential area in Guilan (Table 3), it is found that about two thirds of them are affected by the actions and socio - cultural characteristics. Because a home can appear to be a symbol of ethnic ideology and morality, therefore, attitudes and worldviews influence on the shape of the housing. In rural communities of Guilan, the position of women in the social structure which culminates in the division of labor, ensuring the education, conservation of ethics and subsequent stability, is very important. Women in the traditional economy of Guilan has had no pattern similarity with the family structure in central Iran and the focus of the traditional agricultural economic activities of Guilan are the women, the economic position of women and consequently the functional characteristics of the residential building associated with women are different from the common.

Table 1: Functionality of the most important components of rural residential area of Guilan

Priority of function spaces	Daily life	Climate	Economic	Cultural
Home	✓	✓		✓
Barn ( <i>Gacheh</i> )			✓	
<i>Kandooj</i> ( <i>Korooj and Kooti</i> )			✓	✓
<i>Telambar</i>		✓	✓	
<i>Kotam</i> ( <i>Lam</i> )	✓	✓	✓	
Oven, Smoke home, Stove	✓		✓	
Poultry nest	✓		✓	
Yard ( <i>sahara</i> )	✓	✓	✓	✓
Hedge		✓		✓

Table 2: The main influences on the formation of a residential area in the village of Guilan

Factors effective on the area	
1	Climate, geography and terrain Presence of relative security throughout history The specifications of access roads and the natural state of the region Terrain, slope and sunshine Properties of soil and groundwater Area climate provisions and considering the favorable and unfavorable winds
2	Economy and livelihood Ease of access to the farms and their monitoring The plurality and diversity of economic service elements Dedication of area spaces for economic activities
3	Culture and social interactions Cultural constraints, beliefs and values Level of technology Limits, privacy and watching Territory and privacy Religion and beyond material beliefs Manners of life

Table 3: Criteria governing the layout of the elements of the area

Criterion governing the layout of the elements of the area	Type of the criterion
1 The lack of a definite and rigid enclosure for the area	Cultural
2 Residential tissue integration with farms	Natural- economic
3 Hedge and short porous walls of the area	Climatic-cultural
4 Individual distant buildings	Climatic
5 Spaces being multifunctional	Applicatory- cultural
6 Establishment of home in the middle of the site	Cultural-climatic
7 Location of the entrance door along the main axis of the building	Cultural
8 Water well placing in front of the house	Cultural, ease of use
9 Planting a symbolic or important tree in front of the main facade of the house	Cultural
10 Making the vegetable garden (the garden at hand) in the southern or eastern courtyard	Natural
11 Establishment of <i>Kandooj</i> in front of the house and beside the entrance door	Cultural, ease of use
12 Establishment of <i>Kotam</i> in the middle of the site and exposed to local summer breeze	Climatic
13 Establishment of the toilet in the backyard and out of sight	Cultural
14 Establishment of the space for poultry in the northern yard and out of sight	Cultural
15 Establishment of the barn in the west of the house	Climatic

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