



The Impact of Context-Based Capabilities on the Type of Communication of Spaces

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Abstract

Perceiving an architectural work requires a comprehensive understanding of its context, since the context has a direct impact on both the body and the activities. This recognition can be examined from two aspects: the study of natural and geographical conditions and human-based conditions which include the symbolic, religious-cultural, historical, social, and economic values. What has been considered through this article was the effect of these factors on the type of communication between the spaces. Due to the climate and cultural characteristics across Guilan province, it seems that the spaces from their public realm- that is from the neighbourhood spaces to their most exclusive parts- include rooms and closed spaces that have such continuity which was created by the elements of the boundary between these spaces. These elements link the spaces together and lead to a hierarchy of activities. The research question is whether the relationship between spaces and spatial continuity in traditional architecture of Rasht is influenced by the capabilities of the context or not? This is a descriptive-analytical research, which used a qualitative research method. Data collection was carried out by using desk research method and field observations. The data was analysed through content analysis and independent of numerical documentation within an analogy process. With respect to the effect of filed capabilities on the traditional architecture in Rasht city, first a sample of buildings was selected and the physical elements contributing to continuity of the space have been studied. Then, the effect of the context-based capabilities on them was considered. It was found that these capabilities contributed to formation of the physical elements and behavioural patterns which itself can affect the type of relationship between space and its continuity within old urban tissues of Rasht, including the sensory continuity and the physical continuity between the spaces.

Keywords: Context Capabilities; Spatial Relationships; Traditional Architecture; Historical Texture of Rasht.

1. Introduction

Habitat means the land including a physical area with its special meaning that separates it from other lands. Perhaps one of the most fundamental reasons for the difference between the various habitats is their geographical location, which makes their physical textures and, in particular, their architecture unique. The traditional architecture in every habitat or region has features that appear not only within the physical form but also through the type of space and its symbolic elements. Iranian architects were always aware of the environmental impact of the buildings and have always accounted for the economic features of a building in designing the architectural space to be proportional to human dimension and its personal and social activities [1]. It means that the traditional architecture across the Iranian cities is influenced by its various dimensions like place, time, culture and meaning all of which are influenced by the context [2]. Since most

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of the theorists of this field considered space as the most important architectural aspect and common point of definition, it can be considered as an appropriate criterion for comparing the architecture of different regions. Therefore, in order to address the characteristics of space, the factors affecting the architecture need to be recognized. Therefore, the current research focuses on the effects of architectural environment on the type of communication between spaces.

Given the fact that within the traditional architecture, the context coordinated with the building and all of its aspects, has been emphasized by the building developers, investigation of this type of architecture will contribute to the goal of this research. Thus, Rasht city has been studied through the current research. The city is consisted of old and new textures. The old ones were remained from the Qajar dynasty. The ancient neighborhoods included: Seyghalan, Zahedan, Kiaab, Khomoeiran Zahedan, Khomeiran Kiaab, Ostadsara, Bazar and Chumarsara. These neighborhoods were linearly located from the east to the west direction as between the two major rivers of the city called Goharrood and Zarjoob. The old urban tissues of Rasht has an altitude more than its neighboring points, and the eastern-western axis between the two rivers serves as the basis for the city's cohesion while also connecting the neighborhoods via their centers [3]. This connection contributed to the old neighborhoods of city to be interconnected with each other and extended and interconnected area was created (Figure 1).

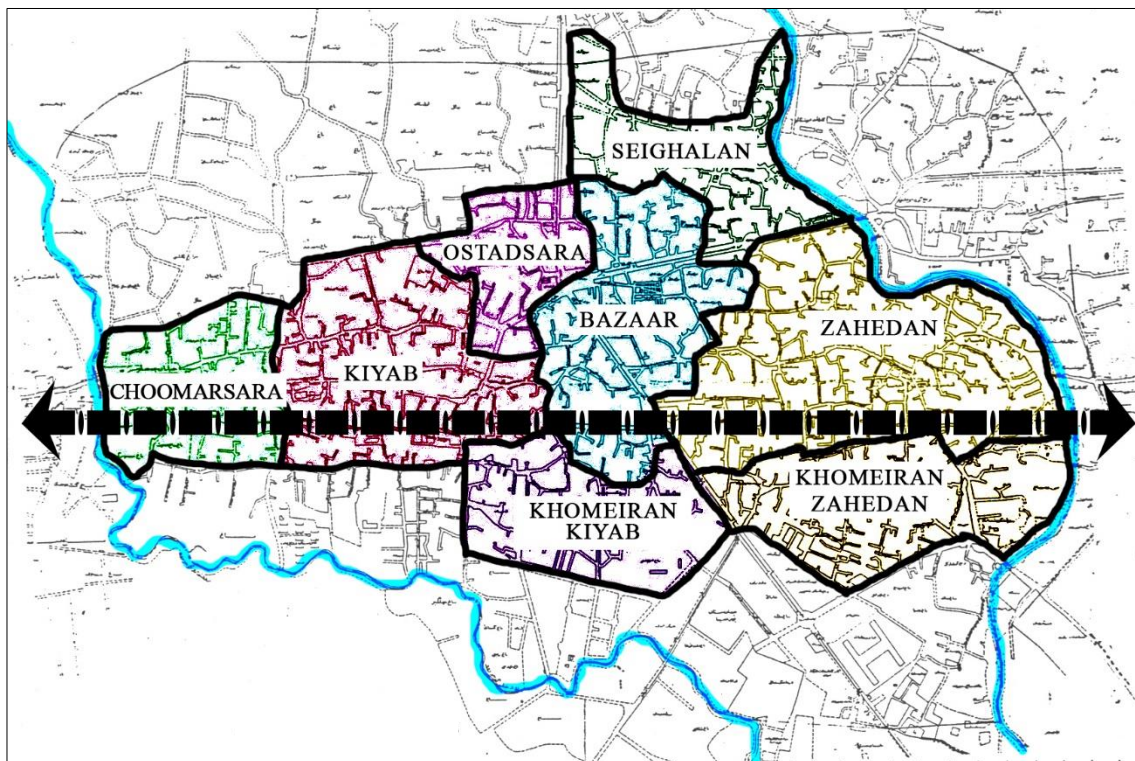


Figure 2. Separation of Rasht historical neighborhoods of Rasht in the present area

Research on the architecture of Guilan province and especially on Rasht city has attracted many scholars including Brombrge, Khakpour, Gorji and Daneshvar, Diba, Yaghini. Some of them has considered the analysis, recognition and classification of different types of buildings. But what distinguishes future research from other researches is the investigation of the contextual factors influencing on the physical elements of the boundaries of the spaces and their relationships. The question is whether these elements in traditional architecture of Rasht provide detachment and stagnation or connectivity and movement. It seems that the elements derived from the context have caused the continuity of communication and continuity of spaces within the traditional architecture of Rasht city. Such theorists as Dey, 2007 [4]; Abedi, 2015 [5]; Grutter, 2009 [6]; Lang, 2014, [7] provided views on the context and the environment, which were roughly the same. However, they considered the context as a more comprehensive concept than the environment, which can involve different settings. Therefore, in order to classify the context, it seems necessary to address the concept of the environment. Here, through the current research, among the buildings of the Cultural Heritage and Tourism Organization of Guilan province, which were provided with documents and the opportunity for us to visit them, there were ten residential buildings along with numbers of mosques, schools, inns, bathhouses and hotels across different locations of the old urban tissues of Rasht which were selected as a sample to examine the spatial communication.

2. Architecture's Context and its Capabilities

Architecture is in interaction with the context of the environment, in the sense that each one influences the other and they can be understood through the whole unit. In fact, "the experience of understanding a building cannot be taken solely in relation to the soul of the building, but also the environment should be considered as part of it" [6]. The context

means any information that can be used to characterize the situation of an entity. An entity is a person, place, or object, which is dependent on the interaction between the service provided and its beneficiaries. The situation of a user is also sub-collections related to the quality of the world (including information about history and expectations of the future) at a given point in time [4]. In this sense, the context gives the audience information about a phenomenon. This information is a collection of world-class qualitative values which is subjected to the time and place where it is located. Some scholars described the relationship between a building and its surroundings: "Each architectural work has its own specific environment, in a simpler form; the surrounding area can be called the context[†] of a building. The relation between architecture and its context is a rooted link of mutual interactions. It can be said that this platform and its architecture are in two-way contacts and are always interconnected" [6]. While a building is shaped according to its context, on a larger scale, it serves as a context for other buildings. Of course, paying attention to the context does not mean copying of elements or generalities, but the utilization of the architecture of the surrounding environment strengthens the relationship between both of them [5]. "Infill work or design in a historic context should be linked the past to the present and projects into the future. This neither implies nor precludes working in traditional or new ways, but demands respect for the significance of a place in its setting" [7]. Therefore, the context where the building is located needs to be considered because it influences on the formation of the building.

The relationship between architecture and context can be read through two stages: obtaining comprehensive information about the context and its compatibility with architecture and its behavioral system. In order to understand the context, it is necessary to examine the environments forming it and with recognizing its capabilities, we can determine the components affecting different domains. "The capabilities of the objects, whether material or immaterial, are part of their belongings which make them usable for a particular being or a member of a species of organisms. Belongings mean the physical configuration of an object or a behavioral location (which also includes aesthetic meanings) that can be used for certain activities" [8]. Accordingly, functionality is considered to be a physical feature that is specific to each entity and makes it possible for a specific group to be exploited.

According to the experts, the environment is known by the nature of the land (deployment) and its processes[‡], and a building is required to adapt to such environment. Therefore, it is possible to consider a number of features from the context as following: gradient, soil and soil type, surface water flow, vegetation-coverage, and even native material. Atmospheric characteristics such as sunlight, wind, rain, temperature and humidity, define the microclimate and its respective processes which together create a natural and geographical environment, and are known as a context-based capability.

In addition to physical features, the capabilities of the environment that are affected by non-physical-based issues are also considered because the type of body and shaped spaces affects the type of actions of users. "Space becomes relevant as place-relatedness in action, not only as geographical place but also as 'locale,' in other words, as a place defined not in materiality terms but in social terms" [9]. So, architecture, in addition to creating shelter which meets the physical needs and natural and geographical conditions, follows the hidden values of the community. These two mutually affect each other. At first "contextualism just contemplated physical aspects but in its developments encompassed humanistic context too and the domain of its studies was expanded on cultural aspects" [10]. Rapoport believes that differences in terms of building types, in addition to being different in the terms of climate, materials, technology, and surrounding landscapes, represent differences in culture, customs, habitat, and social relationships [11]. Therefore, immaterial parameters influence the human environment, which also forms the physical environment. It can be said that "architecture and urbanization deal with spaces in which different kinds of activities take place through different frameworks and in fact convey them to these spaces. These activities are subjected to the cultural characteristics of the community to which the owners of these activities belong" [12]. This means that, human beings, while having unique features, are also influenced by the cultural and social factors surrounding them. With a set of values, beliefs, worldviews and common symbolic systems, the humans make sense to their environment [13], to create a totally human-based environment, including immaterial factors. Once the analysis of a physical phenomenon is possible, the meaning of the phenomenon is perceived in that culture. Therefore, the religious, cultural, social, economic and political values, being concentrated on the human beings, create an environment built by them and their characteristics and experiences at the same time and place and affects the types of behaviours, behavioural limits and locations, and interactions of individuals in each environment. Such an environment, which is a part of the architectural context and is shaped by human behaviour through engaging with other people, is considered as a human-based environment, and forms another part of the capabilities of the context.

The factors affecting the human-based environment can be limited to three factors: economic level, cultural and social issues. Economic factors influence the type of habitation, the width of the building, its details and decorations. This factor varies among people in a neighbourhood, but the other two factors, the cultural and social factors, are specific to

[†] The context in this book is around the perimeter of each architecture, which is expressed in other books and articles with the title of the field. So both words refer to a unit meaning.

[‡] John Lang describes the earth's environment as the nature of the earth and its processes, instead of the physical environment that was used to mention non-social and non-cultural aspects, it has been used. For more information, see Lang, 1393: 87 and 88.

a group of individuals who live together and there are interactions between them. "Social interactions are an important part of individual behaviour, yet concepts of interpersonal influence are varied and often confused across disciplines" [14]. For the factors influencing social behaviour, Giddens believed that "although social behaviour is partly influenced by the conduct of forces such as roles, norms and expectations, but individuals perceive reality in different ways based on their backgrounds, interests, and motives" [15]. Also, "Strauss (1959, 1994) argues that in order to understand identity and behaviour, the socio-historical context must also be considered" [16]. Therefore, the society can be considered a social-cultural system. John Lang described the relation between society and culture: "The social relations of a society are influenced by the culture and values and beliefs of those individuals, and cultural values are transmitted through socialization from one generation to another" [8]. It can be deduced that these two factors are continuous in each other in society. The characteristics of each person and cultural patterns that are common language of each society and vary in different societies influence on the type of interactions. Therefore, recognizing people's behaviours that create the human-based environment requires the recognition of their culture and social criteria. Simply, every context has a natural and human-based environments which specially influence on the type of architectural response to the needs of the user through its capabilities, and this knowledge contributes to obtaining the comprehensive information from the context (Table 1).

Table 1. Components derived from the context

Sub-component		Effective factors	
Geographical and natural environment	Specification of earth	slope	Cultural features
		type of ground	Customs
		Type of soil	Traditions
		Water routes flows	Values
		Vegetation coverage	Belief
	Specification of atmosphere	Type of regional material	religion
			believe
		Sun light	habits
		wind	Art and architecture
			worldview
			Social specification
			Social rules
		rain	
		temperature	Work pattern
		humidity	sociability
			Social interaction
		economic	Economical activities for life

3. The Capabilities of Geographical and Natural Environment of Rasht

Geographical and natural environments create a special climate, and the architecture is the first responder to meet these climatic needs to provide environmental conditions for users. Because humidity and high rainfall are one of the important characteristics of the atmospheric conditions of the province of Guilan, the designing of the guidance of the water from the rain, the intrusion of the raindrops into the building, the resistance to humidity retention, the creation of a curtain and a breeze for natural ventilation and thermal comfort can be considered as the arrangements of this type of architecture. These measures are best suited to the surrounding nature in traditional buildings. In the traditional architecture of Rasht, the architectural solutions of these arrangements are based on the six major characteristics: the foundation placement on the base, the wide and indoor porches for rain protection, the use of materials with a minimum thermal capacity, a wide and open plan with a long geometric shape, the decentralized buildings and sloping roofs due to heavy rainfall [17]. Also, other climate solutions can be used to fit the opposite doors and windows to provide maximum airflow into the room, reduction of the subscription of internal walls, as well as the presence of porches and corridors along the neighboring border that allows the evaporation of moisture of the material, which for all of the above mentioned cases, the air flow and wind penetration are responsible for the ventilation of buildings and prevent moisture from being enclosed in the building. Also, the old texture buildings in Rasht, in addition to dispersed and decentralized settlements, are located in the middle of the courtyard and open spaces to allow excessive moisture removal due to the airflow. Given the fact that in the Guilan, the local breezes are flowing through the north-south direction, it is necessary to expand the plan on the eastern-western axis because of the maximum avalanche. All of these strategies have been developed in response to the capabilities of the natural and geographical environments in Rasht city (Figure 2).

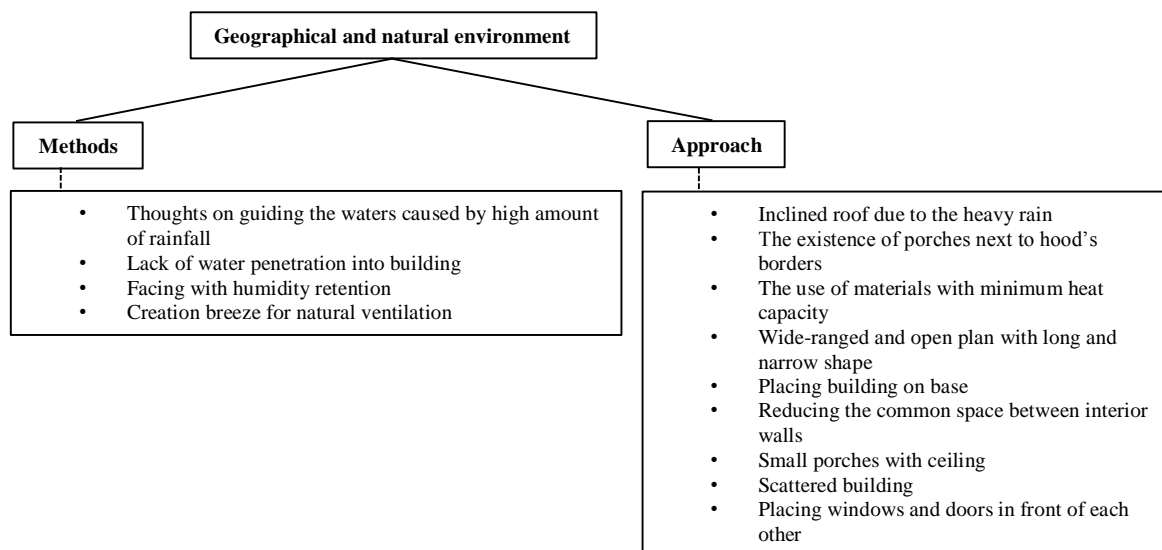


Figure 2. Measures and strategies for reconciling with the capabilities of the natural and geographical environments of the context

4. The Capabilities of Human-Based Environment in Rasht

To understand the human-based environment in Rasht, its influential economic, cultural and social factors, are important. From the economic perspective, in the architecture of Rasht, as in many parts of Iran, a unit based modulus was used which, according to the financial strength of the owner of the building and the number of its inhabitants, the width of the building, including the number of rooms, or number of floors and the total size of the building were different (Figure 3).

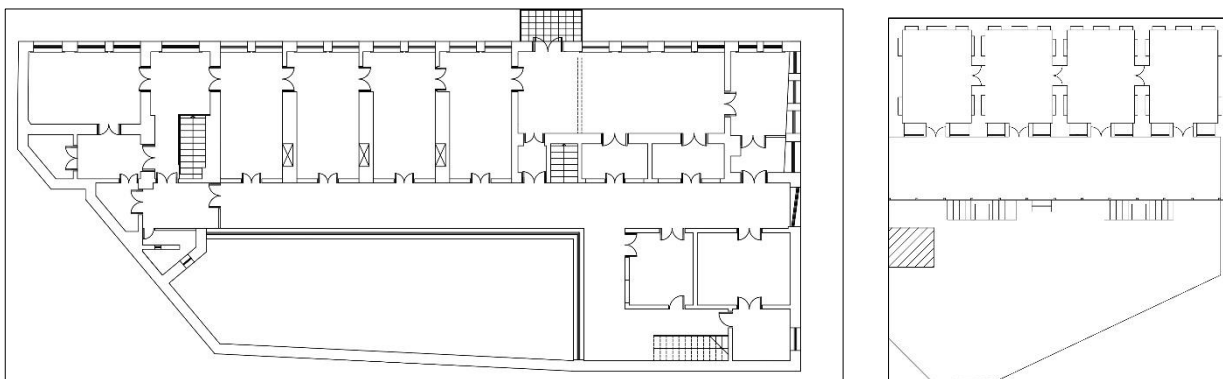


Figure 3. Sample of large and small scale houses; Azarbaani building in Afakhra area and Alemi house in Noghre Dasht neighborhood

Different people live together from different classes of society across the individual neighborhoods in Rasht city, but this differentiates several main attributes of the homes of rich people from the others, which are expressed in six cases: the centralization of the building in the courtyard or the location of the area at the center of the neighborhood in the vicinity of the knots, the size of the buildings, based on the number of rooms and the area of the porches, the number of floors that the families with their children lived in different classes (elderly households in the lower floors and younger people in the upper floors), the difference in materials in terms of quality, periodic repairs and maintenance procedures and also the existence of symmetry and observance of geometric principles such as symmetry and proportionality [18]. In fact, all activities and behaviors carried out in a building are based on human needs and biological practices influenced by socio-cultural factors. The rooms of the houses across Rasht city have several functions. Therefore, people living in the building have common behavior in spaces and, in consequence, personal space, distances and privacy are formed on the basis of individual actions. Most summer activities are performed on the porch, while in the winter most activities

are done in the rooms. But among family members, there is invisible privacy that each individual has a specific place to do daily activities. Accordingly, there is no spatial separation based on gender. Unlike the central regions of Iran, the buildings in this area are not divided into internal and external category, while separations are based on cultural practices[§].

It should be noted that the lack of room differentiation by gender is not interfering with the spaces reserved for men and women because people in a single space make up two small men and women community with privacy [19]. This usually holds when the communities are usually organized into separate groups of women and men within the neighborhood nodes or public spaces.

In the buildings of the rich people, the best room in the house with its large windows and sashes on the main axis and facing the courtyard is considered as a guest room. Typically, in villages and towns, one or more families live in each neighborhood which itself contributed intimacy among residents who respectively provided with security. Given the fact that in the traditional houses of Rasht, the porch is on the hollow and the windows are on the hill^{**}, this spatial relationship establishes security as a regulatory element. In large buildings that the tall walls create the boundary of the alley and the building, the location of the crew is near the entrance to the area in order to better monitor the arrival and departure on a regular basis. All of the above-mentioned cultural and social features of this city form part of the human-based environment, which, along with the geographical and natural environment, gives meaning to the manner of inhabiting in this area (Figure 4).

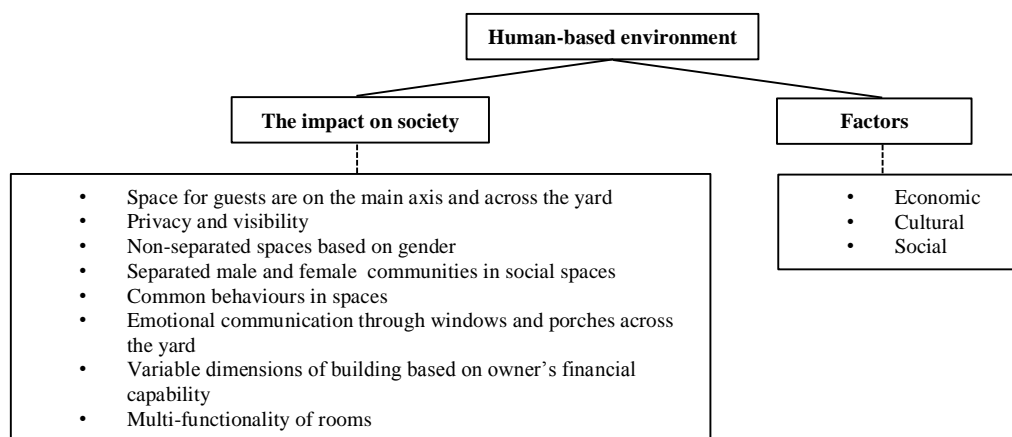


Figure 4. Measures and procedures compatible with human-based capabilities

5. Spaces and Their Types of Relationships

The space has been the context of human behavior, and is the center upon which spatial communication is shaped and measured. The spaces together make the world understandable for the humans. "The relation between inside and outside, which is the first aspect of objective space, shows that spaces have various levels of extension and surrounding" [20]. So the division of spaces to inside and outside is easy and absurd, since with the simplest concealment, a distinct internal space forms from the outside. The physical elements of the boundary from inside and outside determine the type of relationship between the spaces. Two general modes of connection or detachment between two spaces are readable. If two spaces are separated and there is no possibility of moving from one to the other, it causes a blockage of behavior that is considered as inactivity in space. This mode is the opposite of dynamism and movement, which connects space to the other spaces. Motion is not merely physical, but because humans perceive it in the presence of space through their sensory systems, sensory continuity for individuals without the possibility of physical movement can provide a ground for perception of the space. Accordingly, in some cases, the physical elements do not allow human physical movement, but through the continuity of one or more sensory systems comprised of five categories including seeing, hearing, smelling, touching and directing, the possibility of sensory motion in spaces is provided; this means that, while protecting privacy, it is possible to understand another space. Therefore, the physical elements of the boundary between spaces in three states of inactive, sensory motion, and physical motion determine the type of relationship between the spaces.

6. Understanding of the Spaces and their Types of Relationship in the Traditional Architecture of Rasht

Among the buildings built in the historical texture of Rasht, there are many residential buildings and, of course, a number of mosques, schools, bathhouses, inns, hotels, municipal office buildings and bazar complex. The remaining

[§] Bromberge has called this kind of privacy as invisible labels and portrayed them well. See Bromberge, 1990: 126.

^{**} If the wall of the building is the same wall as the road's wall, the window opens from the inside to the alley.

residential buildings belong to the city's most privileged people, who have remained so well-preserved because of the use of high quality materials and their dimensions are larger than other houses. The inns are located in the middle of the bazar for their rest and dock and the hotels were built at the city center adjacent to administrative buildings for hostages and businessmen. Through each neighborhood, there were also mosques, schools and bathhouses for the residents, some of them remained yet. Since research on residential buildings doesn't suffice, the relationship between space and space continuity in non-residential buildings should also be considered. In order to study the type of relationship between spaces, the physical elements of the two-space boundary are considered. These elements are redefined from spaces in case examples.

With investigating the mentioned buildings, the spaces of the traditional buildings of Rasht can be distinguished according to the hierarchy of entry into five categories: the fence and boundary wall, the entrance and its elements, the courtyard, the porch and the rooms and closed spaces. The reasons for the existence of all of these components in the hierarchy of entry from the most general to the most private one are influenced by both capabilities raised from the natural, geographical and human-based environment (Table 2).

Table 2. Separation of the impact of the context on the physical components of the traditional buildings in Rasht city

Human-based environment effects	Body-based parts of buildings	Geographical and natural environment effects
Placing windows in front of locations in order to create interactions and security Creating privacy	boundary wall	Creating covers on walls in order to make a space for protecting individuals from raindrops
Locations for having communication with others in hood	Entrance	Protecting from airdrops
Preparation for entering the building	Yard	Creating open spaces around the buildings for a better airflow
Creating locations for summer activities	Porch	Making breeze around the rooms
A closed space for a coverage Multi-functionality due to the communication of rooms with each other Non-separation of male and female spaces	Rooms and the closed spaces	Placing windows across from each other for flowing air Using of light materials

6.1. Landscape's Wall

Unlike Guilan's rural architecture, the border between the two residential units is the only hedge which, in some cases, does not extend to a typical human's height, the walls that block the view through the enclosure are definite in Rasht city. In buildings with a window open to the alley, the window, in addition to the possibility of sensory communication, directs the airflow into the house. Of course, in some cases, the houses are also located in private estates which have some doors, "the presence of corridors, pillars and guarded alleys in some way are creators of a source of semi-private privacy, which separates the building from the general public" [3]. In some instances, instead of using the vestibule, the porch or part of the entrance will be consoled. This is while the sensory connection between the interior part and the public area is established and the entrance door is preserved unknowingly. It also serves as a hedge for the pedestrians to pass across in the rainy days to respond both to climate and human-based needs. In the traditional architecture of the city of Rasht, the outer walls of the buildings are generally simple, but they have inside, decorations, niches and recesses, which based on its rhythm, divide the space into smaller scale, and this repetition of elements leads to the continuation of space from the entrance to the building.

Indeed, if the alley is considered as a public space and the landscape is considered as a private space, the landscape's wall is the intrinsic boundary between the inside and the outside, and the only connector of the two spaces is at the entrance to the house. But nevertheless, given the physical elements that are found between the alley and the building, it can be seen that not only the connection between them is not interrupted, but the continuity of space flows through the sensory movement from the tunnel to the building.

6.2. Entrance

The entrance is the only physical connector with the building, which is located at the end or middle of the landscape's wall. The entrance is either with an interior door or with only one door that connects the two spaces. Its apparent characteristics range from the placement of only one simple door without decorations, to vestry vestibules, the decorations of which reflect the social and economic status of the owner. The presence of a vestibule or an input retreat makes the person ready to enter the building. And, as an intermediate space, the spatial continuity between the trough and the area is provided both in terms of both the sensory and the physical. On the other hand, the presence of canopies, in addition to introducing the entrance and expressing its importance, protects passers-by from the changing weather conditions of Rasht city. Therefore, this physical element provides continuity of space from the alley to the building.

6.3. Yard

The yard is the first element that faces the passage through the entrance and introduces the axis of the building as a path toward it. "The yards are functionally divided into three main sections including the main, service and mediatory ones. The division of the yard's function is based on its location relative to the home and the geographical direction" [3]. The southern yard is the main courtyard, which is dry and clean due to the sunlight. There are also courtyards around the building to carry out activities that are better off of the eye, which is usually located at the northern part of the courtyard and the enclosing spaces of the two interiors courtyards. In some buildings, the residential part is situated on the eastern or western courtyard of the console, with its windows extending the courtyard space through sensory motion. The presence of the garden and the pond in the main courtyard creates a beautiful view from the inside for the inhabitants. In addition, with large the windows and sash trees, a visual connection and continuity of space appears between the rooms and the courtyard. The physical movement of the yard into the building is due to the position of the building on the seat, through the steps out of the porch. In some buildings, the space under the seat has been used as a basement, with its windows facing the courtyard, providing visual communication with the landscape. Because the building is located in the middle of the enclosure and away from the main wall and main entrance at the end of the courtyard, the visitor's privacy is provided from the alley to the building. Now, if the overall space of the landscape can be divided into open, semi-open and closed landscapes, the yard is a part of the open space landscape which is connected to the closed space by the intermediate element (the porch) and is the gateway to the residential building. The elements that make the boundary between these spaces contributes a hierarchical accessibility from the alley to the building via the spaces' continuity.

6.4. Porch

The porch is one of the most functional spaces used in the traditional architecture of Rasht city and is the main response to the thermal comfort of the inhabitants on hot days of the year. Of course, the mere presence of porch in the houses of Guilan is not unique to this architecture because the porch has been used both within the classic architecture and across other parts of Iran. The important thing about the architecture of Guilan is its function, which is identifiable in two categories: "Firstly, a porch that surrounds the residential building on one or two levels; secondly, a porch that forms upstairs porch (talaar) on the top floor of the building and extends only along the part of the exterior and the lateral sides" [19]. Since the porch circulates the air around the building, removing the moisture from the walls and materials and preventing the direct entry of cold to the rooms, it is constructed on one, two or three walls of the building. Given the fact that the porch has a fairly large width of the entire building, it is the most important place to sit and live and work in the spring and summer seasons, which in consequence, regulates the continuity of everyday life. As a canopy, the porch also prevents rain from falling into the floor and walls. The eastern and western porches, if there is any in some of the buildings, are the main route for the servants that are called as Gholamgard. This type of porches plays only the role of communication and is not used as the main porches for the important activities of the building, and their width, which are the barrier of the raindrops, is about a third of the main porch. The porch is related to the semi-open space within the category of open space and close space and acts as an interface between the room and yard. The continuity of space from the porch to the yard is provided by the openness of its walls and the steps leading to the physical connection of the space.

6.5. Room and the Closed Spaces

The main and enclosed space between the walls, the ceiling and the floor in the traditional buildings of Rasht city is the room, which with insertion of the opposite its windows the air flows inside it. "In 90% of the old-textured buildings in Rasht city, the number of rooms does not exceed 4" [3]. The number of rooms has been considered as unit proportions for the size of the building. The best room of the building, which is usually on the main axis of the courtyard and has a good view of the courtyard, was considered as a guest room, that generally the windows facing the main porch have been always there, and mostly, entrance doors have glass parts to maintain visibility between the outside and inside, when closed. Service rooms are located on the western side to be protected from influence of Western crooked rain. Also, in some buildings, the rooms are also accessible through the middle doors and in conjunction with each other; they operated in the form of a single space that resulted in the multi-functionality of the space and the efficiency of the rooms. If the doors are closed, the space continuity of the rooms is provided by the glass section of the door. In general, for the division of open and closed spaces in the Rasht city, the rooms are at the end of the space hierarchy as a closed space, which by the porch has a continuity of space with the courtyard and there is also a sensory or physical connection between the room and the porch. As above mentioned, the physical elements of the boundaries of the spaces have been identified and the abundance of these elements in the studied buildings is presented in the following table (Table 3 and 4).

Table 3. Frequency of physical elements of the boundary between the spaces in samples of traditional buildings

The name of the selected building		Esmaelzade House	Alami House	Tramsari House	Shafiee House	Savarakhsh House	Razi House	Rahmani House	Ghorbani House	Eshkevari House	Chahrdehi House
Physical elements of borders among the spaces		A-10	A-9	A-8	A-7	A-6	A-5	A-4	A-3	A-2	A-1
1	Space hierarchy (yard- porch- room)	*	*	*		*				*	*
2	Porch or a part of building across from urban roads			*	*		*	*	*		
3	Exterior steps of building		*	*		*			*		
4	Windows with view to alley	*		*	*		*	*	*		
5	Gated and private alleys										
6	Rooms related to each other by doors	*	*	*	*	*	*	*	*	*	*
7	Having view from underground to yard		*								
8	Backward gates				*				*		
9	Consoling building on western and eastern walls									*	
10	Windows in front of yards	*	*	*		*	*			*	*
11	Covered porch that include several rooms			*			*				*
12	Clarity of building's doors	*		*	*	*	*			*	*
13	Entrance vestibule					*					
14	Repetition of wall elements of area			*						*	*
15	Niche on interior walls	*	*	*		*				*	*

Table 4. Frequency of physical elements of the boundary between the spaces in other samples of traditional buildings

The name of the selected building		Iran Hotel	Haaji Bathhouse	Taghi bozorg Inn	Taaghi kuchak Inn	Mohtasham Inn	Shahpour School	Forough School	Samadkhan Mosque	Badialah Mosque	Hakem nsir Mosque
Physical elements of borders among the spaces		F-1	E-1	D-3	D-2	D-1	C-2	C-1	B-3	B-2	B-1
1	Space hierarchy (yard- porch- room)	*	*	*	*	*	*	*	*	*	*
2	Porch or a part of building across from urban roads	*			*						
3	Exterior steps of building			*	*	*	*	*	*		*
4	Windows with view to alley	*	*					*	*	*	*
5	Gated and private alleys										
6	Rooms related to each other by doors		*		*	*				*	
7	Having view from underground to yard			*	*	*	*				
8	Backward gates		*		*						
9	Consoling building on western and eastern walls										
10	Windows in front of yards						*	*			
11	Covered porch that include several rooms	*									
12	Clarity of building's doors	*		*	*	*	*	*	*	*	*
13	Entrance vestibule	*	*	*	*	*	*		*	*	*
14	Repetition of wall elements of area	*	*	*	*	*			*	*	*
15	Niche on interior walls	*	*	*	*	*			*	*	*

The repetition of the physical elements of the boundary between spaces in different buildings indicates the importance of the existence of these elements in the traditional architecture in Rasht city. It is also possible to identify the type of

communication between spaces through their presence in it. Some of these elements act as a barrier and, when being separated, defines the privacy of spaces that are recognized as static in open space. And, in some cases, sensory continuity between spaces exists. In this case, even though one does not have the possibility of passing and having behavioral connection from a space to another, it is possible to understand the adjacent space, through sensory systems. Another mode of communication between spaces allows individuals to physically pass. If there is a physical movement, the sensory movement is necessarily going on. This feature is most commonly seen within the indoor landscapes. Therefore, except those certain cases which require privacy and separation from the public domain while the elements of limitation and privacy act as a barrier, most of the border elements of the spaces provide sensory movement and, in some cases, they provide the possibility of crossing and connecting (Table 5). As mentioned, it can be perceived that the connection and the continuation of adjacent spaces is one of the main characteristics of the traditional architecture in Rasht.

Table 5. Physical specifications of the area between the spaces of the traditional buildings in Rasht city

The condition of elements	Physical elements of borders between spaces	inactivity	Motion	
			emotional	physical
Alley and Landscape's wall	Porch or a part of building across from urban roads		*	
	Windows with view to alley		*	
	Gated and private alleys			*
Landscape's wall and Yard	Backward gates	*		
	Entrance vestibule	*	*	
	Exterior steps of building			*
Yard and Building	Having view from underground to yard		*	*
	Consoling building on western and eastern walls		*	
	Windows in front of yards		*	
Porch and Room	Repetition of wall elements of area		*	*
	Clarity of building's doors		*	
	Covered porch that include several rooms		*	
Room and room	Rooms related to each other by doors		*	*
	Niche on interior walls		*	
The whole unit	Space hierarchy (yard- porch- room)		*	*

7. Conclusion

With reviewing the prepositions and physical and spatial analysis carried out on selected samples, it can be admitted that the traditional architecture and its physical elements are formed in response to the capabilities of the field and as a solution to match it with the building in order to meet the needs of the mankind. These capabilities, which originate from natural and geographical and human-based environments, affect the physical form through such factors as climate and atmosphere, economic, culture and social relationships. The type of communication between spaces can be recognized by examining the physical elements of the boundary. These elements that are located in the traditional buildings in Rasht, between the five main categories of spaces; between the alley and the entrance, the entrance and the courtyard, the courtyard and the building, the porch and the rooms and between the rooms, among the selected samples. Each one is formed for the sake of compatibility with the capabilities of the field. According to the analysis carried out on the research, the extension of the spaces with privacy has been conducted, and none of the spaces cause the separation of other spaces and the interruption of spacing, but it is a kind of a joint and a link from the most general part of the building to the most private part and with creating hierarchy and privacy, each range is also specified. In this case, not only information is not lost through the sensory systems of humans through the passage of spaces, but the sensory continuity also gives rise to continuous perception of the spaces. In fact, in the investigated buildings, different spaces in an obvious hierarchy, while preserving privacy, are continuously in the sensory and physical continuity, which indirectly, is derived from the geographical and natural and the human-made environment of context.

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