EVALUATION OF ARCHITECTURAL ELEMENTS OF THE CITY OF YAZD
HISTORICAL CONTEXT

SAEED MALEKI¹, TORAN AHMADI⁴ AND ELIASMA VEDAT⁵

¹Department of Geography and Urban Planning, Faculty of Earth Sciences and GIS, Shahid Chamran University of Ahvaz, Iran
³Department of Architecture, Ilam University, Iran
²Department of Geography and Urban Planning, Faculty of Earth Sciences and GIS, Shahid Chamran University of Ahvaz, Iran

ABSTRACT

Principles of sustainable development, community needs and improving the quality of human life that he will be a urban space gets in a straight pipe of human psychological and social It was suspected that spaces living in urban areas affected features, cultural, environmental, social, and political history of the region is. homes to meet the needs of atmospheric and climatic straw in each area directly related to Asalhay cultural, traditional and religious people. Old houses are indicative of certain delicacies, which undoubtedly thought creators of the relationship with the surrounding nature and origin of beliefs and ideas for innovation and creativity has. These features can be assessed in order to guide the planning and design of human beings to be living today. Article the elements of a traditional house in Yazd and it has been effective. Studies show that housing, like other parts of Iran, Yazd, in harmony with the environmental conditions, cultural, social and economic has been formed., As of the research question, the height of the texture of residential space in Yazd is home to the traditional mortgage organizing concepts and the ability to get the correct answer to the hierarchy of human needs (related to self-plants, animals, intellectual and spiritual), which can act in new housing to meet the needs and achieve the scale of life. Kind of basic research-applied research methods, descriptive, historical and analytical information collected through the library, field research and related experiences of others and classification information, documents, data, according to the research objectives, as something done. The results of this study suggest that residential areas are nuts old reddit appropriate cultural context and meet local features (Climate Technology), values, and identity consistent with the needs and behaviours and the users.

KEYWORDS : Housing, Historical context, Elements, Yazd

Principles of sustainable development, community needs and enhance the quality of life in urban spaces that have been created to meet this need of psychological and social (Naghsan Mohammadi et al., 2012). William Morris, in his famous speech, in 1881, gave a speech in London: "The diversity of things in the past that can not make their homes beautiful with the new addition to the beauty of the World (d). Shifting to a house when the shots are a thing of beauty that had previously given birth to reduce the persistent nature. If art wants to survive in the future should be to the people, for the people born and force people to take. "In The result can be a useful introduction to these words of the search and selection of indigenous architecture and technology issues as housing for the practice of architecture. Of the environment and the text of the housing construction innovation the man in the exquisite and culture and civilization, and yet recently, dramatic, in all of its complexity is desirable (Abdolhosiny, 2011).

The surrounding areas, the most immediate home environment and human settlements related to him that it routinely takes effect upon impact. Space is the first man in space, it will experience a sense of belonging and of course it makes sense permanently around it wont be in a short time. The first direct mechanistic a home only in isolation or together with the space it takes. Housing means to inhabit (not moving), and home and got a sense of place-based Being. During the course of its history in order to find what will not move, will deploy. That man was not inside the house, it was not possible for her to find a man to grow. Therefore one of the most important physical environment is dealing with the man during the day, he is the housing. House of the place Physical, entire residential area will also be on Ygyrd.

The housing can be an important part of development in a society ( Christian, 1991). And the way home - a heven for body and soul - the best place for relaxation and spiritual man is. Schultz house as an architectural framework that considers the environment to establish an individual's identity, security, and he gives it to her presence brings peace (Schultz, 2005). Homes to meet the needs of climate and climate in each area that directly related to the cultural, traditional and religious people have a different function. Old houses are indicative of certain delicacies, which undoubtedly thought creators of the
relationship with the surrounding nature and origin of beliefs and ideas for innovation and creativity has (Moradi, 2002). These features can be assessed in order to guide the planning and design of human beings to be living today.

Therefore, the most detailed study of the atmosphere that we can provide insight into the concept of sustainability in every culture, is home. Detailed consultative housing and components manufacturer can correct way to understand the culture, architecture and housing settlements in the territory. Previously, people with all the features of belief, culture and creative abilities and understanding of the environment, an integral part of their process, design and construction of their homes. Course, one of the consequences of technological advancement, equal and uniform throughout the country in the architectural and urban contemporary. Buildings that are now in Tabriz, Kerman, Mashhad, Shiraz, Yazd, Hamedan, so is not that different from each other, while the earlier buildings, neighbourhoods and the urban context of culture and taste characteristics of the native inhabitants they represent. The properties of tissue destroyed towns and villages are cut off from their culture and history. Technology system and adjustments are defined as the characteristics of the local culture and sensitivity is not much. In other words, "the denial of technology to try to establish an international character, with the same features of the world. If architecture is profoundly different culture and architecture that separates it from other, related"(Shayanfar, 2008).

What today considered architects and planners are and man the innately interested presence at the spaces is the human aspect of this space is. Understanding of space Old residential building and its components, CPR and reflect the identity of the modern housing units built to accommodate modern technology with native functionality of various environmental conditions to be effective. In this regard, the first City Yazd city and the second largest adobe city in the world meet old legacy of residential structures in the traditional credit and this is reflected in its architecture has been selected. In the consultative study: "How old houses and its components" Yazd and why anthropological spirit and the physical body is the cognitive environment.

**RESEARCH OBJECTIVES**

Informative historical research and understand its teachings and practices of the past for the present and future of the community is very helpful. Previous studies found the complexity and latency of the current thinking on social, cultural and other human beings and their actions and beliefs and thoughts are with stable and unstable elements in the various aspects of the decision is an effective and realistic.

The aim of the study was to investigate the residential areas of old houses in Yazd be given to the correct concepts and the ability to meet traditional mortgage organizing hierarchy of human needs (related to self-plants, animals, intellectual and spiritual), the practical solutions can scale to meet the needs of new housing and living today's gain.

**MATERIALS AND METHODS**

Basic research - applied research methods, descriptive, historical and analytical information collected through the library, athletics, research and other experiences related to and classified information, documents, data, according to the study, the subject is.

**SCOPE OF THE STUDY**

Yazd with the area of 50/99 square kilometers of the historical and administrative center is Yazd. The average elevation of 1230 meters above sea level, the city is located in central Iranian plateau (Ziarat, 2002). The climate of the country is hot and dry parts of the city. Adobe city of Yazd's first and second largest city of the world. The city in its historical context in the form of old houses with traditional architecture plans are introverted. Features an introvert home, no direct visual contact with the interior spaces of urban spaces and different spaces within the element like yard or The house is organized, so that Rosen and openings are open to the elements. Lack of visual communication can be discussed directly with urban spaces and cultural climate of the angles studied (Memarian, 1997).

Refers to the historical old city of Yazd. It has an area of over 700 hectares. Historical texture of Yazd is an organic set of relationships between its components are very
complex rules. The city is influenced by the historical context of housing forms and yet at the same position in terms of urban housing has many limitations. Historical context, most with a two-storey housing, it is compressed together are limited by the narrow streets leading to the main street (Agha Safari et al., 2010). Ruled this part of the city under a municipality, Historic District is the name of the municipality during the early part of the core cities and buildings of historical or Kohandejh the Achaemenid period before the first Pahlavi period are.

Older neighborhoods include the historic main street, I weave between April and Martyr Rajai Southern Boulevard in West Saudi Martyr state and Islamabad, mobilization and Fajr Blvd in East Fhadan street, ten feet north of the Prophet and Lane Saraj.

The historical context of the city of al-Muzaffar saw a lot of development and town center and mosque within the same area and surrounding localities were extended and expanded to the south and the gates of the Old city of the mosque and built markets was. After establishing itself as a creator of life of streak neighbourhood centers are new, they are formed in the vicinity of residential context. If we imagine that the streets Imam, insurrection, Salman Farsi, and S. Rose did not establish the greatness and vastness of the historical context, we can find a partitioning of Yazd. Tissue that could be an area of approximately 1,400 hectares, but the area is now a coherent historical context of the city's cultural center - located in the historic heart of this area is over 700 acres of ancient and historical cities of Iran is the special feature. Each organization has a specific area of Yazd is an old neighbourhood that the neighbourhood is distinct from other neighbourhoods. Placement of signs and spaces between different neighbourhoods and communities have a significant role in the formation of neighbourhood.

ARCHITECTURAL TYPOLOGY OF RESIDENTIAL BUILDINGS, OLD

The formation of the complex architecture of Iran, either individually or as a Time and time Place the By combining the three patterns of open space has been closed and semi-open (Haeri, 2009). Combining these three types of space in residential architecture in most parts of Iran, the climatic characteristics of the region and coordinating role in life is family. Spaces forming the old house can be divided into three categories:

Open Spaces

Iran is home to several traditional outdoor is very important that each can play in the lives of the residents of the house. These areas include: courtyard, platform Sharmy, and the roof terrace is.

Semi-open spaces

Between closed and open spaces in houses Iran, there is an intermediate space or half space covered area called (Asadpour, 2006). These spaces play an important role in creating a visual connection between the open and closed, and the nature of life is highlighted. Areas covered include: entrance, porch, and the porch is a spring house.

Closed spaces

Company of three elements: roof, wall, floor and all components such as doors, windows and Rosen raised indoors. In such an atmosphere, depending on the scale and varied range of sizes and with different functions are included. Including underground and indoor areas of the room.

Primarily as yard space (Outdoor), house, located in the center of the old house is among the most important areas. The dominant architectural feature of old houses to Description The following Are :

- Form Plan: Outside Central.
- Number Floors: mostly A Class.
Enduring stability of the phenomenon of persistence of the pattern, method or system of these phenomena over a long time. In this case, the principle features of the phenomenon with all its material and immaterial is not, but in each period is based on a model of a stable, repeatable and in this way continue to. This replicates and all courses to improve their Baztkrar more in harmony with its surrounding circumstances. In fact, consistent with a positive effect on the development of social, economic, environmental and other public places, and times are measured in (Cowan, 2005).

- Sustainable architecture and principles

Due to environmental problems and crises also on track to achieve environmental and development And achieving sustainable goals development stable, sustainable environmental relationship with architecture importance large finds. The concepts of sustainability and sustainable development in the fulsy new architecture to architecture, sustainable or green architecture, architecture ecological and or architecture. Environment created where all with concept the same with a common purpose. And Architecture Environmentally sound implication are. approaches to
sustainable architecture, the lowest ground fuels (fossil) and the maximum use of renewable energy and clean natural thermal comfort (space heating in winter and cooling in summer).

Sustainable Architecture quoting Charles K. Barrett, "the man-made environment, management committed to the principles of ecological compatibility, and resource efficiency. These principles is to minimize the use of nonrenewable resources, improve environmental conditions, and minimize ecological damage The environment is cognitive (Asadpour, 2006). goal of sustainable architecture, the architectural solutions such as the architects of the appropriate environmental conditions related to the three groups (Bahadori and Jacob, 2006).

- **Housing in the context of geo-morphological**

  Traditional housing in the cities of Iran has had to adapt to certain environmental conditions. Residents of these cities have historically been enjoying your creativity limits To minimize environmental. Design inspired by ecology in constructing housing solutions with a cost and effort to practice it. Old city buildings and local perspectives and forms of adaptation are examples of inspiration and guidance to provide modern buildings (Dehgan, 2003). a total of nearly all structures in the true traditions of Iran will comply with the residential environment climatic factors. These factors can be seen in all climatic zones of Iran, the form and construction of traditional buildings are all subject to the conditions and climatic factors. Factors that affect the climate of a region, including sun angle, latitude (distance or near the equator), the intensity and direction of seasonal winds, humidity, altitude, and finally the plant surface roughness (Ghobadiyan, 2006).

### DISCUSSION

- **Status of housing units in the city of Yazd**

  Studies on the conditions of housing units in the city of Yazd as follows:
  - The growth rate of new housing units in the fabric of the old city of Yazd is much less than residential neighborhoods.
  - The ratio of the total area under the historic fabric of the building is 44.9 percent.
  - Most of the old house is owned by a class.

- **Social aspects of housing and housing spaces**

  Human behavior derives from the needs and desires of their own, in other words it can be said to meet the man himself on the body and the environment that are associated with it, and it affects the demands of their consistent help. water, plants, air and generally are in contact with the inner garden. Rooms, three-door, five-door, hall and wind, sash windows, balcony, yard earrings and tkhtgah around here are, who continue to work and socialize in this space refer to:

  - Hall and Wuthering: Room and communal rituals - summer settlement.
  - Three-door: room, sleeping and fasting - especially in winter, spring, and fall down.
  - Five-door: community house and a guest house and bed home - spring
  - Sash: reception, table cloth and Congregations manor house - spring, autumn and winter stay.
  - Tnby: sleep (room located between the two rooms, hall and funnel) settlements summer.
  - Upstairs: bedroom and work room - spring, autumn and winter stay.
  - Earrings: sleep, quiet and libraries.
  - Seats in the house: a room that has no windows and the patio is attached to the winters have room to seat (Ansari, 2007).
With attention to location geographic and status placement city and what the about method building proposed will was and the needs asked by from side people city, architect Yazdi house is the residents it at dell heat and the rig smooth and the cold severe winter they to comfort (relative to conditions time) of their. As the wall and rampart city supplier security he at equal invasions human and wrath nature is the walls of the house the to syntactic other the role the play that. At desert and margin it spaces home should closed at the four walls are. The type organization space not only from perspective natural but from perspective mental and belief also have importance (Memarian, 2008). Plan review some of the historical city of Yazd, for example, plan and construct quality homes Rasoulian as historic homes below shown.

- **Quality of Home Rasoulian**

The first note critical importance at plan the home separation it to two section are: courtyard large the focus of home and courtyard small west center section smaller home’s. Plus on the courtyard privacy north home the is the with attention to placement it at the kitchen can it the courtyard the kitchen house to account achieved. These home device input complete composed from help index and vestibule prolific and inlet tubes there. One from the corridors to corner courtyard home connected is and other to parallel two outside the the two section home the been and until to courtyard kitchen along results’s.

In response to the tribal family of sweat, so are the members of a tribe, they live together, yet each member of the family are certain privacy. The courtyard of privacy through compliance’s. Social relationships among residents of the neighborhood have the same privacy and security of the physical’s. The shape and configuration of the shared spaces such as vestibule, etc. These are physical. the social interactions between people, so this space is the place.

**Physical dimensions of housing Architect and self-divided**

---

**References:** Center for Documentation and Research, School of Architecture Martyr Beheshti University
The main components of the old houses and historic town of Yazd

- **The entries** in more traditional houses, double wooden doors and each door has percussion. Coarser voice had a ring that brought women and men to sound the sound of the percussion hammer Bmydasht.

- **Vestibule** often octagonal or semi-octagonal shape and often has four ears. Short and a small pore vestibule ceiling light is generally domed platform is designed to sit on it. Vestibule to split the different parts of the house several times to access the house was built.

- **Corridor** was narrow corridor of the maze incoming vestibule leading to his house. Maze of corridors for pedestrians to respect the privacy of the home can not be found immediately, current activities at the yard.

- **Courtyard** in the center and heart of the old houses have been building. Central courtyard with veranda on each side, which features the past was seen in Persian architecture. The courtyard venue for events such as religious festivals, weddings and family gatherings, respectively. Four is usually ear. Aspects of life and the surrounding areas are designated. Usually, a pool and a garden in every yard is different depending on local conditions such as weather and different forms of cultural factors is. Pool and garden in most elements of the old houses that was Hyatsazy.

- **Living** rooms that were less important than the Hall and the rooms were more simple. Living, was a gathering place for family and guests are very close to those elements of decorations were very simple.

- **Kitchens** are usually square or rectangular, and the water storage and water were made. In the kitchen, a place for cooking, baking bread and the inside wall of the storage timber and put it Taqchhay food and cooking tools have been built.

- **Toilet** and shower were usually located in the lower level. This is due to its ease of use and also heat water and drainage was performed. Bathroom was divided into two parts, one for changing clothes (the watches) and another for washing (hot house).

- **The construction** of the old houses and the angle of the sun is Qiblah.

- **Baghchal** acted or made in the middle of the central courtyard and a deck that was in the ground. Examples of this are very arid climates such as in space in Kashan, Yazd and Nain seen. In addition acted to provide the necessary molds used in the soil, it also provides access to water has been Qnat.

- **Terrace** is the moon. The free space above the ceiling of the first floor adjacent to the courtyard and made the anthem of summer nights and slept depending on its location in the shadow right on the hours surrounding walls Myandakhth it has been used. In spring and autumn, at all hours of day and night in the summer, has been used.

- **Coastal** location, access to subterranean water in the house and also mosques and public instances in cities including handmade seen. General pattern of the porch, which is covered with a room at the Qanat Turkish or Klmbh is built in the center of a pond.

- **Windward Rooms** are located in the desert in the summer to stay home every summer to stay on the first floor space that the air deflector uses said. Decorate this space as a porch decoration.

**Climate techniques used in the construction of old houses**

The architecture of the old towns, especially in the desert, could be effective in saving energy, there is the traditional architecture principles, consistent with its favorable climate and therefore the materials are environmental (Yvazyan, 1992). So in this context refers to the use of climate measures in housing construction Old Yazd.

- **Climate technology orientation**

In making the choice for Iran's housing placement and housing are very important in a way that was entirely due to geographic and climatic conditions, solar radiation and wind direction (either favorable or unfavorable) and specifies the location of the type is. Our architecture is based on the experiences of the features of climate, sun and wind and other factors have on the way home Svyaby climate in Iran had been different. Tuesday Ron fundamental in this regard include: Order (Northern East - South West), including towns central as Tehran, Yazd, arranged and Tabriz North West Iran, Isfahan Ron (North West-South-
less changes. 5 to 6 meters in depth is nearly constant (equal to an annual temperature of the air temperature). Ground is always cooler than the air in summer and warmer than the ambient air in the winter. Throughout South and Central Plateau of Iran, under ground cellar dweller as the hot days of summer.

In Yazd, the heat inside the building on the first part of the thermal equilibrium will be a great help with creating spaces like basement, yard, coastal, spring house, you can be safe in the summer heat and radiation.

There are plants in addition to increasing the relative humidity in the summer can cause shadows from the sun to reduce heat. Other characteristics of the trees, the wind's direction and to alleviate. Trees for use in residential areas are divided into two categories: evergreen trees or conifers like pine and cypress trees and shed or hardwood (Ghobadiyan, 2006). The selection varies depending on the climate. Gardens with trichet and, trees low water whether, preserved shadow and playing role at production and the beauty - moisture deficiency environment the compensation to. The levels green the absorption radiation radiation sun barrier reflection re-rays and more unknown asked heat are. Trees to reduce dust, noise and air cleaners are also

Ron's direction in Order No. Mall buildings to the east - to the south-west (the direction of the trend is almost the Qibla). In cities like Kashan, Tehran, Yazd and Tabriz had. One of the factors influencing the selection of this trend, placing the city in the vicinity of a mountain or a mountain. For example Yazd between two mountains, mountain lions and mountain Khrayq is located. In cities such as Yazd and Kashan was believed that the east - west lousy time (ibid.: 136). We did not observe this creates a serious problem in some cities such as Yazd is. By this logic, many homes are built to Ron Kermani. These houses are very hot in summer and very cold in winter and not habitable (Qlmsyah, 2002).

Climate Technologies sinking at Heart Soil

Atmospheric conditions and temperature fluctuations have little effect on underground structures such as earth retaining structures to protect against these changes (Ghobadiyan, 2006). Daily changes in temperature of the earth's surface temperature is similar, but much lower,
effective transition.

To sample Yazd, Evaporation water can be cause reduction temperature air will. The evaporation a space enclosed, like courtyard internal to area water the moisture relative air and temperature depending on the water there. A sunken garden can be one hundred percent effective in reducing air courtyard.

**Climate yard art creation**

Has an important role in shaping the introverted courtyard houses, as privacy policy of ownership, unity of some elements of the house, connecting several spaces, to create lush and lively environment, artificial ventilation through a proper wind flow, an important element In order to organize the different areas as sanctuary for family comfort. Building a garden pond and water garden by planting Mosaffa and has been circulated to the four walls, due to the conservation of landscapes, buildings and courtyards built up in four directions, the protection of buildings and landscapes around the yard and in Family life and moral values and traditions of all ethnic and religious principles are observed(Zmrshydy, 2008).

The geo Yazd radiation as the main issue is to provide people with comfort conditions, the heat is radiated in the day and at night due to dry weather, with the temperature difference is great. Thereby making home spaces embedded in the Four Seasons and the problem has been dealt with.

**Climate Msal fan of good**

Building materials, in addition to the ability of the structure and the economic and security interests nearby places, environment, energy, show the best form of exploitation. The materials used in the homes of traditional indigenous energy have been observed. Yazd materials used mostly clay and bricks.

**Climate Roofing Manufacturing Technologies**

In traditional homes, the roof top the and a yard at roof there brought the at night of summer sleep use have been ‘s. The walls shadow commissioning on part from roof at hours different day of climatic secondary the have. Plus thus, type and the roof at iran with attention to climate the choice have been ‘s. Mostly in yazd roof dome is made. Caused by a dome shape, they are constantly exposed to the breeze. At night the roof then the heat will disappear faster. The domed roof radiation intensity is not uniform in all procedures. Near the junction of the dome roof is more ghosting, especially if the dome is shoot (Tavassoli, 2002). In some cases by two-shelled roof of the building Pnam say that it will be flat.

Figure 4 : Overview of the holes in Yazd
Physiological needs (related to the plant itself) to provide the comfort desired orientation, the light and sunshine, air and tapping trees and making connections with nature are provided and of second-order requirements associated with the home space due to its various features - the beauty of appearance and operation of fruit trees belonging to the senses and create comfort and security (physical and materialistic) - Man needs to be supplied. Context of the needs associated with higher self-esteem, intellectual and spiritual virtue, introverted space, the space (with interior and exterior design or porch) and most of all geometric stability and stillness and silence, thought-provoking and home decoration it has been conceivable. Why The sense of stillness and silence, contemplation and reflection introduction to human thinking provides an introduction to the mind and heart focused on substantial growth bedder and humans can be optional.

There relaxed (in order to meet the needs hierarchy) can be primarily due to the physical comfort of home, and then there are mediated by psychological safety and the environment as they thought. In this respect, silence and stillness (Johann plasma as one of the main architectural requirements of the new millennium is called) dominated the space because of its excellent architecture in the heart, and knowledge, and thus it is God who ultimately rational and spiritual growth and rewarding mental and follows her heart.

CONCLUSIONS

Registration as a fundamental concept in human life, far beyond the functional satisfy human curiosity about the past, so that as soon as it "represents the whole life story is remembered for companionship without making it to the soup tracheal the present and the future is impossible".

Yazd, Iran is among the most ancient cities in the validity of traditional urbanism, and this is reflected in its architecture. According to traditional housing architecture of the city of Yazd, the use of natural conditions, construction coordination and compliance with conditions (applying climate) that have been mentioned. Using the elements, materials, characteristics of their creators and climatic factors related to environmental performance, special talent in balancing the temperature of the panel. Nowadays attention to the architecture and development of indigenous technology measures the importance of both climate is not so, because the population and the use of non-renewable energy sources used in housing, industry, etc., has its consequences in the future fear will be ignored.

Also you can see the spaces formed by the elements, it has the potential to meet human needs hierarchy (with Maslow's theory of hierarchy of human needs).

REFERENCES

Abdolhosiny J., 2011. adapted by and Baku-Tabriz design houses with indigenous culture, climates, Garden, 18, Tehran: 30

Bahadori M. and Jacob M., 1385. natural ventilation and cooling in Iranian traditional buildings, academic publishing center in Tehran: 15.


Ismail N., 2010. Evaluation Status Housing at Settlements informal and provide strategies for organizing them, Sample Case Quarter H. Abad, Yazd, Journal of and Research Urban and Region, year First, Number Four: 18.


Moradi A., 2002. introduced a number of Iranian traditional buildings and the space Brvzhy analysis, cultural heritage, publishing cooperation, Tehran: 13.


Qlmsyah A., 2002. Obituary doctor Mohammad Karim old granddad, Yazd University Institute in cooperation with the forgiveness of publishing, printing, Qom: 328.

Schultz C. N. 2005. the residence of the architectural analogy, translated by Mahmoud Amyryarahmdy, publishers are aware, the second edition, Tehran: 144.


Ziarat K., 2002. The effect of the presence or absence Afaqnh research project in the city's employment, research project: 11.