

STUDY THE SOCIAL VALUES OF IRANIAN INDIGENOUS ARCHITECTURE RELATED TO SUSTAINABLE ARCHITECTURE APPROACH

MORTEZA JAFARI KERMANI POOR^{a1}, HAMID GHANBARAN^b, SALEH SEDGH POOR^c AND NEDA MOOSAVI^d

^aMaster's student of architecture, Tarbiat Dabir Shahid Rajaei University

^bFaculty Board Member and Associate Professor of Faculty of Architecture and Urban Development of Tarbiat Dabir Shahid Rajaei University

^cAssociate Professor of Faculty of Humanities and Psychology of Tarbiat Dabir Shahid Rajaei University

^dMaster's Student of Urban Design, Science and Research Branch, Islamic Azad University

ABSTRACT

Several decades have passed since the introduction of social sustainable architecture and by which several strategies have presented to solve the contemporary crises; but there are still some difficulties in the way of sustainable architecture. It seems that by removing the obstacles through considering the values and characteristics of local architecture, it can be completed. Because according to local architecture works and library documentations, these constructions at their time and place were compatible with objectives of sustainable approach, in formation of local architecture, some social and economic relations are dexterously reflected with natural environment and cultural symbols. Therefore, the intended cohesion of issues of social sustainable architecture is visible in local architecture. Certainly, the local architecture related to the past of our country has been sustainable at its time and place and its repetition is useless. In this paper, the extraction of the repeatable features of Iranian local architecture is in line to achieve the objectives of social sustainable architecture. Sustainability means creating a repeatable process and is a conception that is used more as a measure of a value. With this attitude, understanding the reproducible principles and values of indigenous architecture is very valuable. The present research is based on library studies and has a descriptive approach. The results of this study lead to understand the role of indigenous architecture in creating a social sustainable approach in architecture.

KEYWORDS: Sustainable Architecture, Architectural Process, Indigenous (Local) Architecture, Social Sustainable Architecture, Social and Economical Relations

Addressing the social sustainable architecture and the instruments of formation of such an approach in architectural designs are the necessities of a deeper understanding of the goals and recommendations of sustainability. From one hand, solving the environmental, socio-cultural, and economic problems, and strong connection of these issues leads us to compare and evaluate the indigenous social architecture, and sustainable approach in order its teachings is extracted to design today architecture. The phenomenon of indigenous architecture as a concept in aesthetics and mysticism, in purity of thought and respect to the nature, is an important issue. Although, the indigenous architecture has undergone the transformative phenomena throughout history, but it has managed to maintain its specific identity and represent customs, mentality and emotions, thoughts and ideas, creativity, taste and art of its owners (Dadkhah, 2004: 98).

The natural and cultural influences are incarnated in their obvious forms and simultaneously in confronting with architectural units and sets without they can be

differentiate from each other. It seems that these sets are good signifiers for sustainable approach at their time and place.



Indigenous architecture, Abianeh, Isfahan: Respect to the nature, having identity, representing the culture, customs, etc., climate responsive buildings

Therefore, in this paper, we first deal with obstacles in the way of social sustainability in architecture, and then present the needed resourcefulness.

Changing social attitudes to social sustainable architecture as a repeatable process and considering the socio-cultural, environmental, and economic fields of design bed, and finally addressing the indigenous architecture and its capabilities in creating social sustainability are taken into consideration. Meanwhile, Iranian social, indigenous architecture has been studied as a suitable model towards a sustainable approach and its sustainable aspects has been extracted. What architectural culture of the past has had by itself as a tradition, today it is as a lifeless body before us, and naturally today's societies, in exploring and using the past values, have to search for recognition of unfamiliar and forgotten values (Robubi, 2005: 58).

Correction of the existing obstacles in creating social sustainable approach in architecture

Equating sustainability with biophysical relations and ignoring dependent relationships related to the customs, lifestyle, and cultural values is not correct. Therefore, affairs that cause the problem in the way of sustainable architecture are as follows:

- 1- Policies that are the result of non-criticized and continuous growth of the strategies of sustainability, and today these policies are problematic.
- 2- Aesthetic programs that are skillfully embedded in architectural sense and understanding, and marginalize sustainability correlations or think of form-construction as sculpture.
- 3- It may be incorrect to assume that sustainability through combined technologies, which are represented symbolically, is obtained. In this case, only the appearance of the building is reminiscent of sustainability issues (Willis, 2000).

All these things have caused that the social sustainable architecture is thought to be a technology that is transferable to any area. Here, two problems are occurred:

1. Considering the social sustainable architecture as a product;
2. Ignoring the necessity of conformity of each new issue and technology with characteristics of the site, in other words, not pay attention to the necessity of being local the subject.



Tokyo Nara Tower, based on social sustainability

The process of sustainable architecture

Nowadays social sustainable architecture is seen through the introduction of the architecture as the product of the sustainability. While, by reversing this relation, that is, the sustainability is derived from architecture, a major change will occur. A change means to destroy and re-build architecture and architects. In that case, the architect will ask himself the following questions when the project starts:

- What will be made sustainable through the constructed form?
- If what we claim that is sustainable, is truly sustainable?

The answer of the first question will become clear by understanding the types of activities that a building will support. The answer of the second question is very difficult. As it is necessary to be judged what is built, if the judgment is cruel, in many cases, the answer to this question that whether what is claimed that is sustainable is truly sustainable or not and only it is partially sustainable. With "No" answer, the architect must make clear that what should be used, and if the answer is "partially sustainable", architecture should make it clear how to correct it (Willis, 2000).

In order to make a correct relation between the constructed form and what ought to be sustainable, we should change the consideration toward designing a building as a finished product, and pay attention to procedures which involve this topic, that what are supported in an intended building? How they are fixed with other processes and cooperate with each other? This means that they are seen as the connector of the intersection of service flows, materials, information, people and other things of living. Social sustainable architecture means a process that can be repeated. Sustainability is a concept that is more used as a measure of value of a method. A method which is confronted with contemporary security needs through a sustainable and repeatable behavior. Thus, here the process is considered as well as final product. Certainly, social sustainable architecture recognizes that the final product may be worn due to the passage of time and may need to be replaced. But it also recognizes the process that remains survival and viable, and that process can be renewed or repeated (Norton, 1999).

Sustainability needs to be seen in relation to the process without unnecessary destruction of environment and resources, and also as a power that is resistant and is sustainable and as a thing that forms the relationship between biophysics of the constructed object and social

culture and sign and symbol. This perspective toward sustainability as a process is more than a finished product. It means looking at it as an ability to change. It also means to keep a good sense of what things should be preserved and what is suitable for sustainability (Willis, 2000).

Whether buildings, objects, activities, technologies, state of residence or work, mental and physical habits and what is unsuitable for sustainability refer to consistency, coherence and continuity are active and have the sense of movement and mean a saving for the future, such as the preservation of water resources, sustainability protects what has the capacity to be preserved. So, the architecture needs to be designed as an activity which makes the environment stable, associated with the ability to sustain what needs to be sustainable.

Social sustainability is a feature of the basic local architecture

Sustainability, in spite of its basic and universal slogans which is global and target the problem of the ground, in order to achieve realistic and performable strategies from one hand and supporting the variation which exists in nature from the other hand, recommends local approaches and considers the slogan “think globally, but act regionally” (Ahmadi, 2005).



Diagram 1: Triple stages of social sustainable architecture process

A social sustainable architecture combination, as a ready-made product, cannot be moved from one place to another. As mentioned, the social sustainable architecture policy presents some characteristics, but environmental sustainability, social-economic sustainability, ... are essentially content features which related to localized and locally available resources and traditions, or the rights and needs of local people, are relevant, (Norton 1999).

Therefore, we cannot classify a special building technology as technology of social sustainable architecture, or mistakenly consider it as an appropriate technology. A valid system that works well in one location would be inefficient in a new context in the

future or at another location due to changing cultural, social and physical factors. Thus, we should pay attention to the potentials of those processes, technologies and systems, in order to be able to possibly use them in a given location, because sustainability is an underlying feature.



Shoshtar New City, social indigenous architecture that is a combination of patterns of social, traditional architecture with technology and modern materials

However, sustainability puts us forward the new ways of achieving to human-made environments, but to gradually become more important the cultural-social factors in design process, the intertwined and more complex products are provided (Ahmadi, 2003).

Recently, many methods of environmental technologies fail before they successfully complete, because their designers have not been able to detect the cultural-social continuity and content of architecture, or understand the needs and expectations of those who intend to use it. In fact, here, the topic is to forget how local culture and values must be maintained. It really affects the success or failure of a project (Cole, et al. 2006).

The global process of technology progress in the fields of information and communication has led to increase the consumption, continuing urbanization and the growing internationalization of capital and businesses around the world, and has caused profound culture become new ethnic patterns, and cultural relations become the unexpected fact of combinational cultures. At the same time, the rapid growth of technology will involve in increasing environmental problems at the global scale, which its results could be seen as the ecological disasters, such as rapid loss of resources and the natural species, high consumption, and increasing the values of energy wasting. Thus, it is understood such that the artificial environment as a prominent cultural branch and the main energy consumer seriously implies on both processes (Cole et al. 2006).

Preparation the bed of sustainability

As noted above, information and knowledge about new ideas and skills, and many new technologies can hardly be transmitted to other cultures and countries. These ideas, skills, and technologies, even after the introduction to a new cultural context, either have partially been implemented or have not been consistent and have been replaced, or have been ignored. It seems that the key of this problem is in disability of those who did not consider the expectation, desires, and local cultural needs in designing and propagating new technologies. Before being claimed, these technologies as a fact, are valuable and applicable, it must be understood that they have sophisticatedly linked to culture, and the technologies that have been accepted for a group of people, will not necessarily be accepted by others (Cole, et al. 2006).

In subjects that their pressure is on issues such as the future, the best ways for designing, and planning for the public centralized realm, some interesting cases are considerable:

The key arguments are concepts of civil construction-architecture and social sustainability, which are strongly tied together. Neither ecological methods nor cultural sustainability can be responsible separately and distinctly. The responsibility of environmental guarantee, that is, cultural sensitivity, is cultural sustainability, which should include ecological awareness. For civil construction, without compatible combination of these two, no future will be viable and sustainable (Cole, et al. 2006).

Therefore, understanding the context and content of the local culture is necessary to implement and transfer the technologies successfully. New technologies and practices, in order to be accepted and work, require being in line with expectations, needs and culture of the people who use these technologies. When these issues are considered that which techniques and methods can be generally acceptable and present a social sustainable architecture that is responsible for specified characteristics, the following criteria and regulations can be the base of evaluation and comment about social sustainable architecture (Norton 1999).

- The main use of existing materials and local transportation.

- The use of resources that are available enough to meet the underlying and general demands so that does not lead to environmental degradation.
- Lack of dependence on equipment that is not readily available.
- The use of skills that can be practically developed in the community.
- The architecture that can be obtained according to local social economic fields.
- The architecture that can produce valuable results.
- The architecture that can respond to the effects of local climate.
- The architecture that has flexibility to meet local needs and habits.

- The architecture that can be replicated by local people.

Many cases of successful social sustainable architecture have been existed before; they have been compatible with these regulations and have been obtained through local struggles and initiations, or sometimes foreign supports. Understanding that what are really sustainable needs much more time in order the skills are created and developed to prove an idea, or for establishing an organizational or financial system which can be sustainable, is evaluated. Thus, according to what was mentioned, we can show the preparation of the bed to create sustainability as illustrated in figure 1.

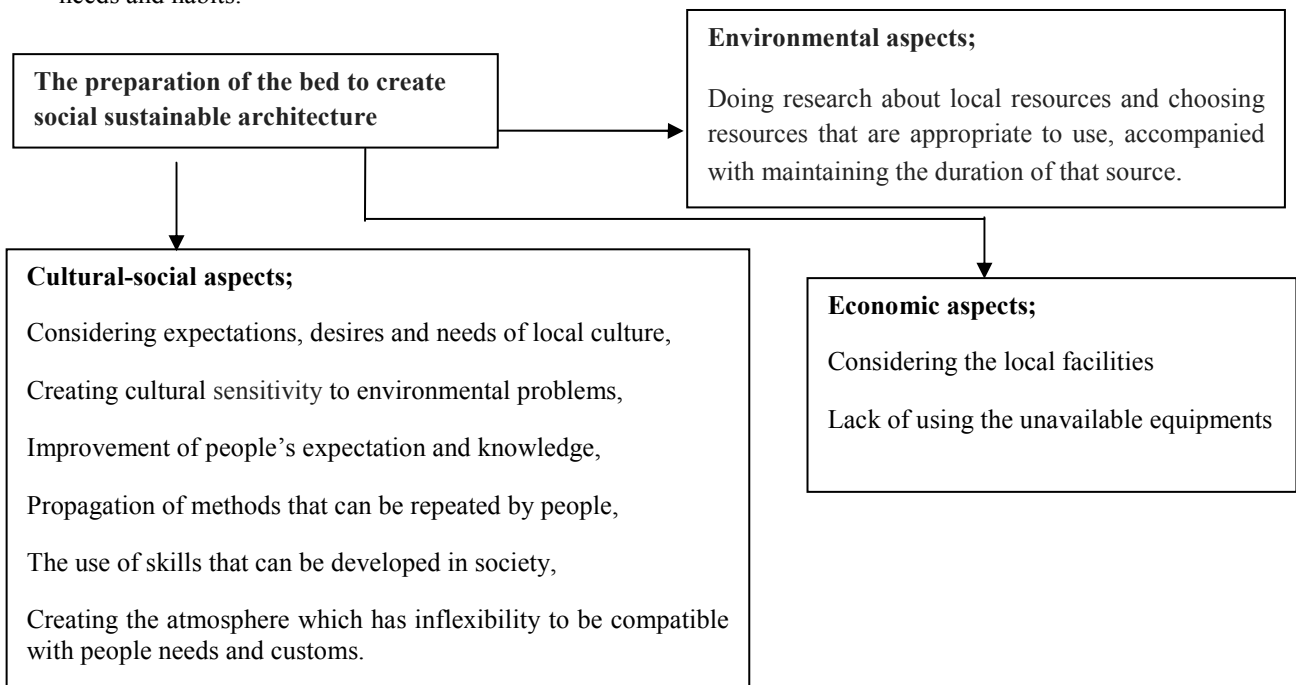


Figure 2: The cases of preparation of the bed to create sustainable architecture

Rejection or acceptance of the social sustainability through the past traditional ways

According to what was mentioned, social sustainable architectural approach requires making an appropriate local basis. The mistake that may occur here is to take into account the traditional designing or climatic designing instead of local designing. While the local designing is not the repetition of what was common in the past, however, it may typically be possible to follow the traditional design process. Climatic Design is a part of the local social architecture, but not exactly it. Traditional policies have led to the creation of shelters that have been

stable for centuries, but today cannot meet the present needs and available resources. In this environment, finding new solutions and policies that are truly sustainable is very difficult. If we must match ourselves with rapid growth of needs, so we should prepare the solutions where they are available (Norton 1999).

Most of the samples of designing methods and traditional construction building are proper examples of sustainable architecture in their time, and present the appropriate using of local sources that have been compliance with local skills which have been combined to construct an artificial environment that are compatible

with people's needs. But factors which include statistical growth of change and converting the rural spaces into civil spaces, to become empty the natural sources and human construction and significant changes in expectations and lifestyles, all are combined with each other in different ways to wear out the traditional bio-capability or even the last methods of providing shelter. This means that there are a lot of traditional ways to solve the needs. However, some aspects of which still work well, some other aspects are non-functional, incompetent or totally non-sustainable. Today, people need other types of buildings; more buildings which are constructed with higher speed; also their financial income has changed. So all these changes mean that a building method that has worked well in the past in its share, may now be difficult to build and maintain a construction by which, and is not be able to meet today intended needs. Gradually it becomes clear that we ought to be looking for an alternative. As it was noted in preparing the basis for sustainable architecture section, considering the methods, skills and equipment that are available and repeatable in the region is very important. Thus between rejection of

bio-compatibility of traditional solutions and lack of access to many modern options, social sustainable architecture defines a method so that such a gap is filled. It seems that taking into account the traditional architectural policies is the first step for this movement. On the other hand, acquiring the knowledge about environment and architecture is only possible by understanding human activities in his surrounding environment; and the objective of architecture can be considered to create a human notion within a physical form. So if we accept that the architecture is the reflection of human the physical life, a life with all its needs, beliefs, attitudes, and generally its values, we must realize that our current and future architecture cannot be unrelated to past architecture (Robubi, 2005: 57).

In formation of local architecture, some social and economic relations with the natural environment and cultural symbols are subtly reflected. This architecture is responsible for needs of a society in connection with natural factors and spiritual demands of human beings (Dadkhah, 2005: 98).

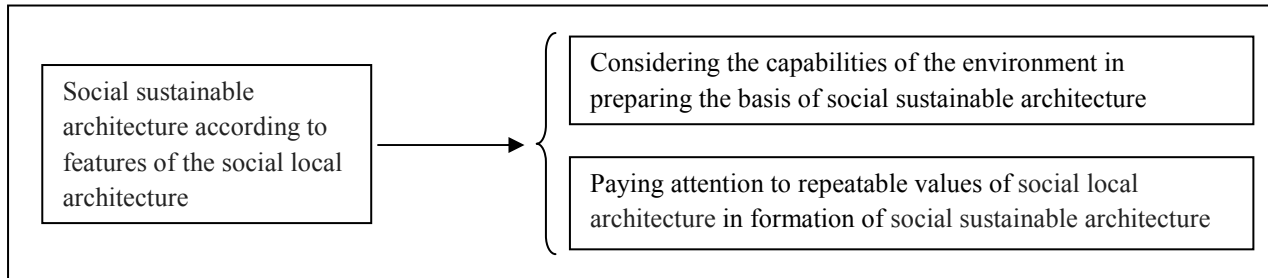
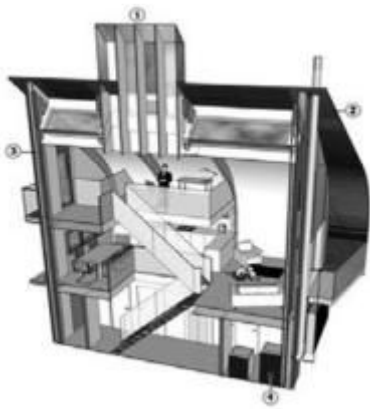
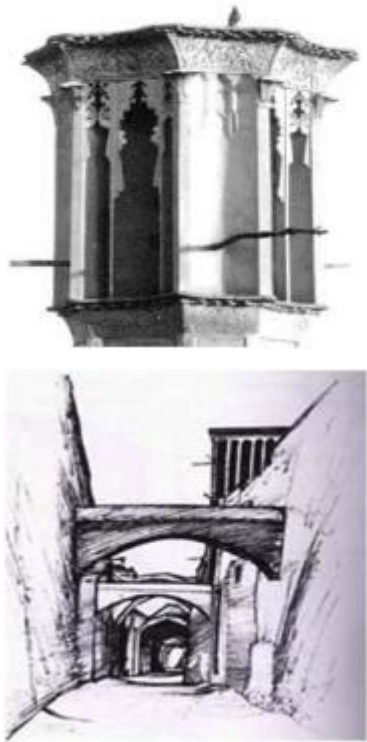


Figure 3: Removing barriers to social sustainability according to local properties





Paying attention to repeatable values of social local architecture in formation process of social sustainable architecture:

- Reuse the air trap element which is a combination of technology and aesthetics of traditional architecture.
- Arches over the alleys to create shade.

Given the foregoing discussion, it is clear that the initiation of the frame of past architecture is not our consideration, but understanding the social sustainability of construction in its time and place, and the appreciation of those values that today can also work well, is desired.

Sustainability approach in principles of Iranian social indigenous architecture

The presence of principles in Iranian architecture allows all to use the general language among them. Iranian traditional building principles are appeared through the standard unit of measurement, modular design and appropriateness in designing. What principles of Iranian architecture present is based on considering to stages and levels of designing and management of construction. The purpose of this discussion is not the recommendation of the pattern and form repetition, but the purpose is to identify the social and indigenous architectural principles, and identify the problems that indigenous architecture was proposed to solve it. Iranian

traditional architecture has focused primarily on the following:

- Looking at nature and associating its sacredness,
- Stages of designing and human designing,
- Reliability of the construction.

Looking at nature and associating its sacredness

A work of architecture, from the time of creation, from the moment that has to take the first step for its embodiment, blends in with the soil: receives water from the earth, after changing its morphology and chemical-physical content differently gives the water back, sets its face to breeze, and its back to the winds that annoy it; integration with nature is accompanied both with the obedience and utilization of it. Establishment in a natural environment, whether due to respect to it or in connection with total beliefs that were born of the old culture and adventurous history of this ancient land, is done with elegance and subtlety (Fallamaki, 2005: 82-83).

Meaningful nature in architecture

In Iranian society and culture, there is respect for all elements of nature. In Gnosticism, it is believed that water, wind (air), soil, and fire (light) and worldly factors are the basic elements of our surroundings. Thus, in Iranian architecture, the presence of these elements is always evident. To believe in these four elements still provides the appropriate solutions for insight and interaction of the building and the surrounding area. Traditional human being has always explored the nature to better recognize the Lord.



Manifestation of nature and Iranian garden in a carpet. Symbols of the nature are meaningful and their presence is felt in traditional human life

Having backyard is a good example of Iranian architecture. Inspiration from the nature is seen in many of the characteristics of buildings. Using natural plants, natural lighting, natural ventilation and thermal properties of land and other natural forces, all are included in this architecture. Also in the scale of designing, planning and urban applications, the use of natural potentials is evident. In Iran, the direction of building is the most efficient factor for the use of resources and natural potentials (Pirnia, 2003: 1).

As each natural creature that lives in its environment and depends on it, social traditional architecture has also been formed in its natural context, and harmonious and dependent to it. Its component materials are obtained from the nature of its environment. Its design and plan is such that has the most compatibility

with the local climate, and creates less imposing and destruction for both the environment and the construction itself (Tahbaz, 2004: 112-114). According to the Iranian principle, any work that causes damage to the environment, that work and its component are prohibited. This is the same thing which is considered as the first step or basis of sustainability (Vakili, et al. 2006).

As can be seen, respect for nature and its elements have an important influence on the conceptualization and innovation in early stage of designing.

Autonomy of using the local canvas materials: for example, people had the habit of using soil of excavated foundations, to make bricks (Pirnia, 2004: 32).



Presentation of water in the Iranian garden: referring to concepts of water such as holiness and purity and flowing the life in it. Water consumption management and consideration of the concept of contentment is clearly evident in Iranian garden

Avoiding the absurdity of contentment: This feature is trying to show all practical efforts done to achieve maximum efficiency for users that considers some consequences such as control of wasting costs and avoiding structural loads, and making light the buildings as well as possible through the removal of parts of dead loads. Today, the equal conditions for such concepts are obtained through the low level of adequacy, sufficiency, efficiency and different levels of economic management and technology. Of course, meanwhile referring to consumption culture among Iranians in the past is essential. In this architecture there is contentment meaning the most optimal degree of utilization of the available resources and the management of individual and social life based on the facilities (Naghizadeh, 2002: 43).

To follow the nature and creation, materials and aggregates have been used with considering the principle of contentment, and their maximum efficiency and power have been used. For example, in using clay or plaster, with a thorough understanding of materials and their properties, each material has been used at the peak of its perfection corresponding with its characteristics, that observance of this principle has provided the architect so many facilities. For instance, in application of raw brick, the construction of different types of dome and vault, in application of brick, the art of brickwork and a variety of combinations and brick paints, in application of glazed tiles, a variety of paints and tile designs, and in applying water, different methods of using water in subterranean water, pond, fountain and waterfall have been achieved

that by applying them in architecture, pleasing and dreaming gardens and palaces have been built in the desert (Tabbaz, 2004: 112).

In the concepts of modern architecture several examples of this kind have been included in a sustainable building design. Selecting compatible local materials includes the application of internal energy, inactive energy, and environmental methods of designing in technology management which related to the effects on the environment. The basic concepts mentioned in designing stage and human designing in social sustainable architecture, meeting the spiritual and physical needs of inhabitants have particular importance (Soflaei, 2004).

Human designing is the most important principle of social sustainable design that deals with the capability of living of all components which form the global biological system. This principle deeply roots in the need to maintaining chain elements of biological systems that the continuation of human life and survival related to their existence. In modern societies, more than 70 percent of the life of each person is spent in the interior spaces. Therefore, the most necessary role of the architecture is to create the constructed spaces that sustain the security, health, physical comfort, mental health and utility of their inhabitants. Meantime, we should not forget the efficiency factor of the scheme: if the efficiency of products with low energy consumption can be as equal as that of the previous product which lacks this feature? (Kim, 1998: 14).

Introversion: each society believes in a great respect for its culture, habits and customs. Iranian culture respects the family and its privacy. Accordingly, the Iranian people have shown two kinds of spaces in designing. Activities related to the families and their privacy should be established in a separate space compared to general activities.

People-like activities that relate to the needs and consequences connected to the capability of a building to be applied, that is, all needs of the users of the building should be responded in spite of their social positions (Pirnia, 2004: 26).

This system and its characteristic in designing show how much the architecture behaviors sensitively toward the culture of the community members. Thus, the priority of designing mission relates to satisfaction from basic and primary needs of human being through rational

functions. The stages of Iranian architectural design consist of many steps. Five steps in traditional designing include:

1. Measurement: to understand the physical size and possible capacity.
2. Dialog: to communicate with clients and two-way negotiation with them to understand the required needs.
3. Design: drawing the general idea and demonstration the concept of designing in order the designer and the client can negotiate with each other.
4. The approved plan: it is to complete the projects that are based on accepted sketches, approved ideas and concepts by the client.
5. Added cost of finished designs based on the approval of possible changes: it is to design the final documentation in a way that a building to be built as it is designed. This step shows how the customer's need and his/her satisfaction are important for Iranian architecture.

The instructions mentioned in this section show that in architecture process, the user client plays one of the key roles in the system (Vakili, et al. 2006).

Flexibility: in the social indigenous architecture, the aim is to understand the spirit of the location not the location itself. The lack of paying attention to dynamic and application within the place and emphasizing on object and its static form that causes the most of architects and planners, believing that by changing the value vectors in architecture the physical shape is changed, talk about the progress, change, adaptability and flexibility, but unfortunately, this movement still remains in the same form of physical activity, regardless of its meaning. This kind of attitude, due to considering the covers and appearance criteria, will not succeed. Because in this context, the main concept is not adaptability and flexibility of physical shapes but is the adaptability and flexibility of functions. Phenomena which in relation with the social, economical, cultural, and psychological properties in a dynamic interaction always result in occurrence of certain functions. The concept of functional adaptability in architecture indicates this fact that no phenomenon and element cannot be stable, unless in the appropriate location conditions so that, its innate nature accept it, because never a tree grows in the salt marsh (Robubi, 2005: 59).

The considerable sample of this statement is reflected in a traditional house: in a traditional house, variability is possible by following the map of house from a public pattern of formation and using the module basic system. The house yard, due to being located in the center, is placed in the dividing place of functions and has had the ability to turn into a collective space for parties and celebrations. This centrality rather being a physical centrality is a conceptual and functional focus. The depth of light trap spaces in various directions of the yard is different. Sometimes, this depth is as large as the arch of the facades of the surrounding walls, and sometime as big as the depth of the hall and air trap. Inside facades of yard which are formed by following the same public pattern make possible the recognition of major and minor spaces of the house. The depth of facade sometimes is as the size of component layers forming the wall and sometimes as the depth of sunshine breaking and entering antechamber room, and in some cases as the depth of a porch or a portico. Neutral availability to rooms through the courtyard and corridors connecting the rooms has made possible the diverse function of the rooms. This kind of internal connections causes to combine the functions in a space and to reduce wasting connecting spaces. Other elements such as casement _ unlike today's specialized functions_ had a variety of functions such as the capability to communicate and pass through the yard, lighting to interior spaces simultaneously. Sash windows, however, were not used for passing, with variations in the geometry and the use of colored glass, with a circulation of day and the light, and change of radiating light, had create a variety of interior spaces (Aynifar, 2003: 69-74).

The reliability of the construction

One of the characteristics of Iranian architecture is the use of geometry in its designs. Geometric design rules lead to a better understanding of the size, proportion and beauty and forces related to the structure which are concerned with the building construction. Precise understanding of geometry and the cases related to it

enables Iranian architecture to provide a more stable and valuable forms (Pirnia, 2003: 25).

Module unit: basic unit of measurement in building is called module which is a basis for other measurements. Module was the small and identical measures were applied wherever they were needed (Pirnia, 2003: 30-31).

Measurement system helps the geometry and its benefits were applied to better understand the behavior of forces in the building structure. As mentioned in the previous section, use of module made the architect to be able to create flexible spaces, and this flexibility leads to increase the life of the building.

Material science: material science is the study of static stability of construction, the technique of construction, and the basis of study the material which includes static and dynamic essential needs in construction, and also includes the attempts done in constructing to be compatible with the existing levels of knowledge and technology.

The benefits of applying the principles of Iranian indigenous architecture towards social sustainable architecture approach

If we accept that the form, including the form of natural or social phenomena, belongs to external world and has specific properties or energy that this energy can change an object to anything else, and also we accept that human beings have been responsible for physical and non-physical needs and necessities to provide the constructed space using shapes with environmental facilities and restrictions to meet their needs, in this case, we can claim that the social indigenous architecture has been and also is an applied science in any time of its history that with the universal concept of physical and non-physical properties mentioned previously in this section, can be considered as repeatable values in social sustainable architecture process to create modern constructions (Robubi, 2005: 66).

Cultural-social aspects
Being people-like: the social indigenous architecture behaves sensitively to the culture of community members, including introvert approach which considers the user's needs in terms of his/her need for privacy and security
Compatibility: Compatible with residents of the building due to flexibility
Making meaningful the nature in architecture that causes to create consumer's correct consumption culture and contentment
The orientation change bad habits: avoiding unnecessary things which lower efficiency. Readiness and ability to change our minds may be able to solve problems, even more than to find a definitive solution to a problem.
Environmental aspects
Considering the conceptual properties of the nature which leads to create the sense of respect to the nature, contentment, and becoming meaningful the constructed environment
Considering the material characteristics of the nature, climate design, and compatibility with surrounding environment
Autonomy of ecological materials: the use of safe, healthy and local materials, available technology, accountability and practicability which are the obtained outcomes in today construction activities the concentrated energy and consequences such as the concept of sustainability, maintainability, serviceability, and simplicity have been taken into consideration.
Economic aspects
Avoiding the vainness of contentment which leads to saving resources and will result in lower costs
Flexibility of the construction which increases the life of the building, and consequently increases creating the new spaces, and destroying the useless spaces.
Material science: creating stable constructions which reduces the costs of maintenance and repairs

Figure 4: Repeatable values of indigenous architecture in each of the interested areas of social sustainable architecture

CONCLUSION

The barriers which exist in the way of social sustainable architecture are solvable by considering social sustainable architecture as a process and paying attention to indigenous fields of its formation. Sustainability needs to be seen in relation to the process, as what forms the relationship between biophysics of the formed object and social culture. Inability of designers who have failed to detect the continuity and cultural-social context of architecture or to understand the needs and expectations of those who intend to use it have led to the failure of many projects in the field of sustainability. In fact, here we talked about how the local culture and values must be maintained. It really affects the success or failure of a project. Sustainable architecture approach requires making an appropriate local bed, but traditional policies that has resulted to create shelters that have been stable during centuries, today cannot meet the present needs and resources, thus here considering the local features means to consider its values. Considering the local properties is significant in two ways: one is to create an appropriate basis for the formation of social sustainable architecture, and the other is to use repeatable values of indigenous architecture in the architectural process. Preparation of context to create social sustainable architecture can be studied in all three socio-cultural, economic and environmental fields that in all the branches the features and capabilities of the region and its people are

considered. In extraction of the values that should be considered in formation of architecture, attention to repeatable values of indigenous architecture is very important. The effect of these values in each three fields of environmental, social-cultural and economic sustainability can be studied.

Designing of research horizons to continue and develop the processes: As mentioned before, new technologies and practices, in order to be accepted and work, require being in line with the expectations, needs, and knowledge of people and culture that possibly employ it. In this paper we pointed out the indigenous architecture that in a period its connection has been interrupted with the past, thus, understanding exactly what today people want is an important point in understanding the applicability of the extracted values of social indigenous architecture. Therefore, we can achieve to a kind of architecture that works well as the past architecture and is set in continuation of this architecture.

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