

## Public Participation versus Architectural Quality An Analytical Model for Iran Environment

Pouyan Berahman<sup>1</sup>, Kazem Memarzia<sup>2</sup>, Farah Habib<sup>3</sup>

- <sup>1</sup> PhD. Candidate in Architecture, Department of Art and Architecture, Science and Research Branch, Islamic Azad University, Tehran, Iran Corresponding author.  
<sup>2</sup> Associate Professor, Department of Art and Architecture, Science and Research Branch, Islamic Azad University, Tehran, Iran.  
<sup>3</sup> Associate Professor, Department of Art and Architecture, Science and Research Branch, Islamic Azad University, Tehran, Iran.  
[P.Berahman@gmail.com](mailto:P.Berahman@gmail.com)

**Abstract:** Current dwelling conditions in Iran especially in large residential projects are far from desirable. The purpose of this article is to determine and define a general and overall perspective for making Iranian residential units more desirable within a practical framework such as public participation. The objective is to use a descriptive and qualitative approach in the development of a practical model with three variables. These variables are public participation, architectural quality, plus residential quality and desirability. This article relies on descriptive and qualitative approach to develop a model for understanding logical relationships among effective factors in public participation and satisfaction. This article defines the role of public participation in the process of residential unit construction under current circumstances of Iran. It uses Maslow's hierarchy of needs to relate participation models with various levels of residential quality and public satisfaction. The last part of this article shows that public participation and people-oriented architecture are the missing factors in achieving residential quality and desirability in the present circumstances in Iran.

[Pouyan Berahman, Kazem Memarzia, Farah Habib. **Public Participation versus Architectural Quality An Analytical Model for Iran Environment.** *Life Sci J* 2013;10(6s):701-708] (ISSN:1097-8135).  
<http://www.lifesciencesite.com>. 110

**Keywords:** Participation, Public Participation, Residential Units, Architectural Quality

### Introduction

Public participation in design of residential units is not a new concept. It is as old as the construction of the first dwellings, when people constructed them based on their own physical needs and identity. Citizens were eliminated as the basic element of the design and construction processes with the emergence of modernism and the development of a set of universal models for residential units followed by their global adaptations.

Many architectural researchers have tried to redefine public participation in the production process of residential units. The most notable of them are Cohen, Turner,

Midgley, Arnstein, Davidson, Driskille, and Sanoff. A review of the opinions they have expressed regarding public participation can reveal the similarities and differences of their views.

The most notable similarities are various levels they presented from non-participation to participation in the form of hierarchies or wheels. They showed the multi-dimensional aspect of public participation and emphasized on giving the same weight to their participation as of other contributing factors in the design process. The differences that are evident in the views of these scholars are the way they looked at public participation favoring one effective factor

over another. Nevertheless, all of them favored public participation in the design process.

Public participation is an interactive concept with a primary condition that requires active, equal, equitable, and willing contributions by all effective factors present in the participation process. This participation should be in such a way that no effective factor can substitute another. All elements should have equal and equitable rights to express and impose their views.

Architecture is a product of a process that includes designing, construction, and maintenance at varying levels of quality. Architecture inherently has at least two basic quality measuring bodies, namely, producers who work in a virtual environment (i.e. experts and architects) and users in the real world (i.e. citizens).

Architects measure the quality of architecture based on the circumstances of design process, production and refinement of construction materials, plus construction maintenance. Citizens measure the quality of architecture based on the satisfaction they receive from their living spaces. This dual measurement system requires the satisfaction of architects and citizens as the means for assessing the quality of residential units.

This article uses its own special definition of public participation in Iranian environment and relates different levels of participation to various levels of satisfaction in order to develop a model to present varying satisfaction levels of residential spaces from architects-citizens perspective.

### **Participation**

Oxford dictionary defines participation as the act or fact of taking part in an activity or event. Participation is a multi-dimensional concept whose accurate definition depends on the subject under study and the contributing elements.

Participation in design and construction of residential units shall be subject to the

roles played by different contributing elements. Three contributing elements can be identified in the production and use of residential units in Iran. These elements are the government, construction practitioners, and citizens.

Turner believes that when government takes part in social affairs they act without full knowledge of real public needs. Government ignorantly pushes aside local citizens from the process living it void of contributions from people abilities and capabilities (Turner, 1976, p. 102). When government takes responsibility to implement participatory procedures, it pays little attention to citizens and experts. This lack of attention may turn participation into mere slogan and fabrication.

The best role for government is to prepare the ground for achieving a desired level of participation. When government acts as a facilitator and is eliminated from being an active contributor, the design and construction of residential units become dependent on the two remaining elements being citizens and experts. The contributions of the two determine the role of each one and the type of their interactions.

Three types of participation can be identified based on the relationship between citizens and architects. They are 1) social participation in public domain and among citizens, 2) experts participation in experts' domain and among experts, and 3) interactive or target participation in a shared domain by citizens and experts.

Various levels of participation are recognizable depending on the approaches taken by each participating element.

#### **1. Experts Participatory Approaches**

##### **1.1. Advisory and Legislative**

This approach assumes citizens as a virtual totality and put a general emphasis on the importance of their needs. In this approach, architects act as professional advisors in the design and

production process of residential units. They also help government in the development of the relevant regulations and legislations.

### 1.2. Innovation and Creation

This approach is specific to experts and architects domain. Architects endeavor on understanding various needs of citizens and work on offering innovative and creative solutions to satisfy their needs. Decision making in this approach is centered on architect's innovative and creative design.

## 2. *Social Participatory Approaches*

### 2.1. Need Perception

This approach takes place in public domain. People learn from government publicity and awareness programs to gain better understanding of their needs for better quality dwellings. They turn into active critics of the current living conditions and demand for more desirable living spaces.

### 2.2. Public Motivation

This approach takes place in public domain. People learn about their true needs and become motivated to actively participate in the design and construction process of their own residential units. Citizens take active roles through maintaining critical approaches and expressing their views seeking more desirable living spaces.

## 3. *Interactive Participatory Approaches*

### 3.1. Thinking Freedom

Citizens become participatory consultants in this approach by taking part in all steps of architectural design and production. They express their views during the design process and make sure they are incorporated into the design. Architect's role here is to produce a three dimensional model to represent client's innovative ideas and counsel them toward reaching a proper architectural product. Public view is

innovative in this approach and architect's view is critical and guiding.

### 3.2. Mutual Cooperation

Citizens provide their viewpoints in this approach and actively participate in the design and construction process with their innovative ideas. They turn away from mere criticism and become actively involved in the design and production of architectural product. Architects maintain a cooperating approach and pay attention to client views in order to incorporate them into the design and construction. They participate in the process with own creative abilities and critical views acting as a trusted decision makers and persuading agents.

## **Participation Level versus Architectural Quality**

Quality of residential space is an important measure in the living quality models. These conceptual models measure living quality based on objective and subjective indices.

Objective indices are related to the physical shapes, forms, sizes, and quantities of the objects that exist in the surrounding environment. Subjective indices are related to how people perceive their environment. Objective indices represent the physical quality of the living space and subjective indices represent the wellbeing and satisfaction of its residents.

Physical properties of an environment result into various levels of satisfaction depending on subjective indices of individuals and their various hierarchical needs. However, physical properties of an environment may not be able to assure individual satisfaction on its own. A physical space may be satisfactory to an individual with certain personal needs and given points of view. But, the same space may be unsatisfactory to another person with other needs or points of view.

Heidegger believed that understanding depended on human presence. Human presence shapes and defines the objective format of objects and provides an identity to the object. The understanding of any object depends on two factors: 1) its physical existence and 2) existence and presence of an individual who uses that object. In this view, physical existence is necessary condition for achieving quality living environment while subjective belief of individuals and users that have roots in their needs and views is sufficient condition. In a dual measurement system of architects-citizens, the quality of residential units depends on 1) the design, construction, and maintenance of architecture on the part of building practitioners; 2) physical and psychological satisfaction of residents; and 3) residents way of maintaining their residential units.

### **Residential Quality versus Living Satisfaction**

In consideration of various definitions of participation, the desirability of residential units should be classified in terms of Maslow's hierarchy of needs in order to build a framework for analysis. Maslow grouped human's basic needs into five hierarchical levels numbered by their importance.

1. Physiological Needs
2. Security Needs
3. Social Needs
4. Esteem Needs
5. Self-actualization Needs

Physiological needs rank lowest and include those which do not present any problem if satisfied but may disrupt life if they remain unsatisfied. When we move from lower needs to higher ones they lose their significance in physical contentment and gain importance in psychological and spiritual wellbeing.

Physiological needs are vital for human survival and include the need for water, air, food, and sleep. Security needs are important

for survival but are not as demanding as the physiological needs. Social needs include belonging, love, and affection. Esteem needs are the ones that reflect on self-esteem, personal worth, social recognition, and accomplishment. Self-actualizing needs are related to personal growth and development involving exploration, innovation, creativity, experimenting, and experiencing the surrounding environment. Relating satisfaction to Maslow's hierarchy of needs may be used as a measure for quality of living.

Architects presently play the main role in the design and production of residential units in Iran. The role of architects has increased significantly because of their social position, the trust clients put on them, and lack of self-confidence on the part of clients. Iranian architects have reached a commanding position as the main player in the design and production process of residential units. Their position represents self-actualization and increased satisfaction on Maslow's hierarchy of needs. But, citizens still remain on lower levels of need satisfaction. We examine how a higher level of satisfaction from living conditions can be materialized.

When we relate living satisfaction to Maslow's hierarchy of needs, residential units become shelters as important as food and air. Shelters are places for protection against rain and wind. When we move up one level, residential units become a place to provide physical security and tranquility. On the third level, they are places to take care of our loved ones. Iranian buyers mostly consider these three levels of needs when purchasing residential units. They give the highest consideration to security and physical arrangements.

On the fourth and fifth levels, identity and belonging gain significance in satisfaction from residential units. The need for respect and sense of self-actualization

come next. The top two levels of needs rarely come into play in purchase of residential units. Buyers make their selection close to the first three criteria and convince themselves in setting aside the two top levels of needs.

An important point here is that the level of participation follows the same pattern as level of satisfaction. The closeness of the two patterns points to a hidden relationship between them. We refer to the definition of dwelling in order to reveal the invisible relation between participation and satisfaction and to close the gap between them.

Norberg-Schulz defined residence as closeness of human to a natural or fabricated place. In this definition, love of space and place is a part of the existence in this world and is preferred over technical issues. Technical, material, and practical issues of a living space are necessary conditions for satisfactory residence. Yet, taking residence means satisfying the necessary conditions together with attainment of identity and a sense of belonging to place.

Residence as a qualitative concept represents maintaining a meaningful attachment between human and a given environment. This attachment is developed in an attempt to create a sense of identity and belonging to a place. Feeling at home means being comfortable and having a sense of belonging. Similarly, dwellings find a sense of belonging to each other the same way members of a family feel they are related. Various levels of residence and a sense of belonging to a place may be presented in the following classifications based on their material representations and psychological bearings.

#### 1. *Physiological Needs*

Residence satisfies resident's basic and practical needs providing relative satisfaction. This classification is

equivalent to physiological needs in Maslow's hierarchy.

#### 2. *Social Belonging*

Social belonging represents deep associations between individuals of the same tribe, race, community and/or religion. The residence satisfies the basic needs and provides a sense of social belonging to assure relative satisfaction from the living environment. This classification is similar to security and social needs and social relations in Maslow's hierarchy.

#### 3. *Space Belonging*

Space belonging includes human sense of belonging to the nature of place; a feeling for objects, buildings, and community resulting from increased social belongings; and a sense of identity, concept, and/or memory of objects resulting from shared group experiences. This classification is similar to psychological and identity needs in Maslow's hierarchy.

#### 4. *Place as a Reflection of Human Identity*

Place becomes a reflection of human identity. It becomes part of an individual and provides a sense of pride and honor. Identity symbols of a resident stem from individual's identity and is associated with his personality. The endogenous development process flows through the residence. The place becomes a permanent residence which is its basic concept. The example is a villager who builds his own house, grows old in it, becomes a member of community and has no inclination to leave this place and move to a city, with a long time yearning to stay there for final rest. This classification is similar to identity, autognosis, and self-actualization needs in Maslow's hierarchy.

Satisfaction of all these belonging needs is manifested in a sense of place. Therefore, sense of place is the fulfillment of Maslow's



hierarchy of needs which produces satisfaction.

Based on our understanding of Cross theorem on the concept of place and relating it to increased level of public participation including training, awareness, and cooperation, we arrive at four relations between the sense of place and various levels of participation.

- 1- Physiological association and belonging based on development of educational relations and increased awareness.
- 2- Cognitive, social, and family association and belonging based on development of motivational relations.
- 3- Historical, family, and mythical association to a place built upon freedom of thinking and innovation in social interactions.
- 4- Psychological and spiritual association based on practical cooperation to develop the prior associations in production of residential units where residents can identify themselves with.

In order to realize the required associations, four programs can be devised for public participation training and awareness.

- 1) The first program follows certain objectives based on citizens training and awareness for practical, security, and aesthetic needs. The training programs offer principles of participation including mutual respect, morality, and cooperation with the emphasis on tradition and culture. The minimum objective of this training program could be to take a critical view of the current residential units. Citizens shall earn sufficient motivation to participate in social activities at the end of this training program.
- 2) The second program shall cover inter family relationships. Participants learn about practical and aesthetic needs and desires of their family and try to identify

many symbols of their identity as applied to their residence. This program shall development inner motivation in participants to promote free thinking as a base for creativity. Better maintenance and upkeep of residential units plus continued residence are the minimum achievable objectives of this program.

- 3) The third program promotes spontaneous free thinking and expression of views after creation of inner motivation in citizens. The interaction of different or similar views in the target residential community shall create social interactions among families. Such interactions prior to physical settlement in the residential units shall create psychological inhabitancy in residents stemmed from social interactions among neighboring units. This approach shall provide community members with the opportunity to select their neighbors instead of waiting for forced assignment. Therefore, families with similar views and cultural backgrounds are grouped together to form homogenous neighbors. With the participation of an architect, people creativity can be directed toward the design of residential units. The minimum objectives of this program include long term residence, formation of group memories, and social interactions among people before taking physical residence.
- 4) The fourth program puts the prior three training into practice. When residents learn about the importance of such concepts as participations, identity, culture, criticism, creativity, and the like they will initiate a practical cooperation in the process of residential construction with the objective to attain desirable units. Such cooperation will group neighboring units to create participating mechanism with the help of experts in

an attempt to include their identity symbolism in the design and construction processes. Active participation of citizens in the development and creation of an architectural design with the help of and input from architects is likely to produce a desirable residential design. This cooperation shall increase satisfaction, sense of belonging, and group memories for the participating individuals regardless of what architectural outcome is produced. This cooperative approach with prior participatory training in the first training program can facilitate the design and production of valuable architecture with desired identity. The result will be residential units built based on identity of the citizens who will live in them.

The relation between participation level and residential unit quality can be presented in the following conceptual model. It is developed based on residential space and satisfaction of different levels of human needs. This model considers all three participating social and public approaches to achieve a target form of participation.

The conceptual model includes three effective interactions:

- 1- Intra feedback
- 2- Inter feedback
- 3- Interactive feedback

Intra feedback includes those that citizens and experts receive from facilities provided by the government for increased public training and awareness.

Inter feedback includes the ones that are exchanged among citizens and among experts separately in their respective domains. In this form of feedback, architects use their own creativity to apply various public identities in the development of rules for architectural design and construction. And, citizens develop motivation among group members to provide their critical

views to be incorporated in architectural works. Citizens gain awareness about their true needs based on their own identities in this process.

Interactive feedback includes those that are exchanged between people and experts in a common and shared domain. Citizens provide their views about the design of residential units and actively participate in the production process. Architects use their critical and innovative abilities to apply public creative ideas in order to drive an achievable residential design.

### **Conclusion**

This article extended the definition of participation into three patterns of participation, namely, social, expert, and interactive participation. The objective was to use these patterns of participation to develop a model representing different levels of satisfaction versus various levels of architectural quality. This model is to be used to promote public participation for the attainment of better quality architecture in residential unit design and construction.

Three players participate in the production of residential units in the current environment of Iran. The three main players are government, citizens, and building practitioners. Limiting the role of government to a facilitator of participating approaches and elimination it as an acting player are the necessary conditions for the realization of true participation. Citizens and architects are the two remaining main players with equal but heterogeneous roles in the production process of residential units.

Interactive participation is only possible with people-oriented public participation and architectural-oriented expert participation. Social participation assures citizen's satisfaction and expert participation assures architects satisfaction. Similarly, interactive participation assures satisfaction of both citizens and architects in achieving an

architecture built upon public culture, identity, and needs.

Citizens and architects have certain rights in a participatory approach. Both parties have equal rights in the development of quality residential architecture. Quality residential architecture is dependent on design, construction, supervision, implementation, and maintenance on one part, and on residents' satisfaction and fulfillment of various levels of needs from physiological to self-actualization.

Participation in design and construction of residential units can be classified into three groups. Public participation is built around a flow of critical thinking in public domain centered on their needs and motivation. Experts' participation is built around a flow of creative thinking in architects domain centered on participatory legislation and innovation. Target participation is built on a flow of cooperating free thinking on the part of both citizens and architects in a common domain centered on expressing creative and critical views.

The need for government involvement in training and awareness of citizens and architects may include introductory training in principles of human needs, types of cooperation and participation, developing mutual respect, and development of aesthetic design. Motivation is an inner drive that promotes citizens in adapting a critical view of their own living environment to create practical grounds for design of desirable residential units.

Free thinking is accomplished when citizens attempt to improve their living conditions through creative approaches. The outcome of this process may not be an aesthetic architecture but increased level of

satisfaction in builders and residents. When citizens and architects cooperate, they combine public creativity with architects' knowledge and innovation toward creating desirable architecture.

## References

1. Arnstein, S. R. (1969) A Ladder of Citizen Participation, *Journal of the American Institute of Planners (JAIP)*, 35 (4), pp. 216-224.
2. Berahman, P. et al. (2013) Redefining Stages of Participation in Housing Process: Analytical Model for Iran, Submitted for Publication in *Life Science Journal*.
3. Cohen, S. (1976) *Some Factors Influence: Citizen Participation in a Community Project*, Unpublished Master's Thesis, Cornell University.
4. Cross, J. E. (2001) *What Is Sense of Place?* 12th Headwaters Conference, Western State College.
5. Drisklle, D. (2002) *Creating Better Cities with Children and Youth (A Manual for Participation)*, UNESCO Publishing and Earthscan Publication.
6. Maslow, E. (1987) *Motivation and Personality*, New York: Harper and Row.
7. Norberg-Schulz, C. (1985) *The Concept of Dwelling: On the Way to A Figurative Architecture*, New York: Rizzoli.
8. Sanoff, H. (1999) *Community Participation Methods in Design and Planning*, John Wiley & Sons Inc.
9. Turner, J. F. C. (1986) *Housing by People: Towards Autonomy in Building Environments*. New York: Pantheon Books.

4/13/2013