OPEN ACCESS

International
Journal
Of Modern Engineering Research (IJMER)

Considering User Participation in Light Of level and Stages of Self-Selection in Architectural Design Process (ADP)

Mahdi Torabi[1], Mohammad Pir Mohammadi[2], Mohsen Roshan[3]
Mahmud Bin Mohd Jusan[4]
[1,2,3,4] *Department of Architecture, Universiti Teknologi Malaysia, Malaysia*

Abstract: *Presenting the new definition of self-selection in Architectural Design Process (ADP) needs to clarify the edges of this new concept versus the others, which exist in design area. Referring to conducting content analysis in previous published studies, the general meaning of self-selection is a situation in which user decide to do something for themselves rather than do something that has chosen for them. On the other hand, different users' and designers' vision of self-selection make a connection with End User's Personalization (EUP) and User Centered Design (UCD). Both self-selection and user participation indicate the user decision-making power. Consequently, for earning a high level of user satisfaction, users should allow to contribute partially or totally, in certain decision-making processes, which have normally considered as the typical responsibility of architects. This paper by gathering a close group dissection and using brainstorming method, has attempted to argue the levels and stages of user participation in order to discover and establish the level and stages of self-selection in ADP.*

Keywords: *Architectural Design Process (ADP), End User's Personalization (EUP), Self-selection, User Centered Design (UCD), User Participation*

I. Introduction

Researchers typically try to find a new spot for themselves. All of them know only by studying old concepts and arguing them, the new meaning and definition may come up. After that, the main responsibility of researcher is to clarify similarities and differences of this new concept with the other definitions that already existed. In our case, several design definitions have been taken as the base plate of introducing the entire structure of self-selection in Architectural Design Process (ADP). End users always want to contribute and personalize their own place. Based on this kind of need and desire, End User's Personalization (EUP) is the closest concept of self-selection in ADP [1], [2].

Nevertheless, all design processes have another side too, which wants to control the whole process. Although responsibility of architects should come first in each projects, founded on designer's side, by using the methods of User Centred Design (UCD) as nearest conception of self-selection in ADP, user's values and ideas also can catch [3], [4], and this leads this study to investigate the same pattern of satisfaction in ADP. At last, for explaining the level of contribution of users and the power of architects in ADP, the idea of user participation's stages and levels has been reviewed and argued. Ultimately, in conclusion section, self-selection's stages and level will be presented.

II. Self-Selection

Conferring to primarily studies, the self-selection as self-respect's sub-criteria of human values guide behaviors, meaning that values can guide the people selection or evaluation of behaviors and events [5]. Therefore, normal decision-making is a vital part of what characterizes humans throughout history [6].

Hence, self-selection is selecting of self. It means self-selection is defined as a choice that you make by yourself [7]. Without a doubt, behavioral decisions of people play a fundamental role in better understanding of self-selection. In this area, self-selection is a term used to indicate any situation in which individuals select themselves into a group [8]. Otherwise, self-selection is the best way to describe the decision-making power.

III. User Participation

Participation is a general concept covering different forms [9]. Within the field of design, there is a growing concern with user satisfaction, which benefits from technological innovation in order to identify users' needs and facilitate user participation in the design process [10].

Furthermore, although direct contact between users and designers can be risky if it is not properly structured, user participation is necessary for reaching out diverse ideas for the final decisions that are made during the ADP. However, involving users or stakeholders early and often in the ADP is a key part of delivering

a successful project and so clients need to ensure that this happens [11]. On the other hand, if users take part in the decision-making process of design, they also stand some of the responsibility for the success or the failures. At the end of the day, they cannot turn around and blame the architects for design faults [12]. This participation improves by user needs, values and wants through designer's guidance. In the meantime, designer plays significant part of a controller of what the user thinks. Architect can extend the mental faculties and the imagination of the user by whatever he/she owns of artistic background and experience, which others lack.

3.1 Stages of Participation

Grounded on user participation idea, each ADP has four stages: Planning, Designing, Construction and Evaluation. Although over the recent years these stages have been divided to several parts depending on their time or parts, user participation comes into different levels of them. Description of these stages have mentioned in literature [13], [14], [15], [16] as follows:

3.1.1 Planning

This stage means the stage of policy preparation or the stage of knowing what the user thinks of doing. Therefore, this is the architect's responsibility to know how to allow the user to be participated in the planning process.

3.1.2 Designing

The vital factor in this stage of participation is that the design has to express the user needs and values. Consequently, architect ought to choose and supervise the level of user participation carefully in designing which decisions are the most important ones for ADP to take place in this stage.

3.1.3 Construction

Although numerous users ignore this stage, it is a very important one, as it appears in the self-help project. Regularly, the main purpose is to decrease the cost of the building. Indeed, participation in this stage helps architect manage the budget. Therefore, financial decisions prove that this stage have value position in each projects.

3.1.4 Evaluation

Several researchers do not consider this stage as one of the user participation stages; however, we claim in this paper that Evaluation is one of the significant stages in participation. The aim of this stage is to evaluate the building by User experience (UX) after passing an enough period of living in the building. The architect would ask them the advantages and disadvantages of the building by various questions. The result of this participation would benefit architects to have a better understanding of developing user needs and values in ADP. Ultimately, they will find out how to improve their design in similar future projects.

3.2 Levels of Participation

In any design process, level of participation depends on many factors. According to numerous studies, the most important keys are User, Architect, Project, and Culture of the Community and Democracy in the Community. All of these features make level of participation divides into several portions as to control the architect or the user in ADP. These portions are discussed in [13], [17], [18], which are:

3.2.1 Non-Participating level

The level of participation could be zero. In this level, the architect controls every move in ADP while user participates in none of the four stages. In other words, in this architecture there is no user point, as the diagram below shows.

Fig. 1 Non-participating Level

3.2.2 Low Level of Participation

This level means the user participation is small and hence insignificant. The architect takes in his consideration the principle requirements of the project. In this level, architect sets the priorities according to the user ideas and decides which one is helping to improve the ADP.

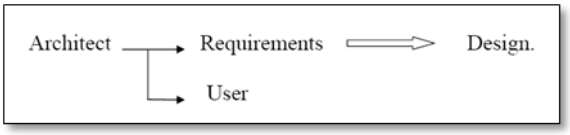

Fig. 2 Low level of Participating

3.2.3 Equally Balanced Level of Participation

In this case, the opinion of the user is equal to the opinion of the architect. The only thing, which they demand is the requirements. Architect and the user cooperate with each other to conduct a project, which expresses the culture of the user and community.

Fig. 3 Equally Balanced Level of Participating

3.2.4 High level of Participation

This level of participation appears when the user has a big power to enables him to administer the stages of the project. It means that user is able to direct the project to the concept of their participation in taking the serious decisions.

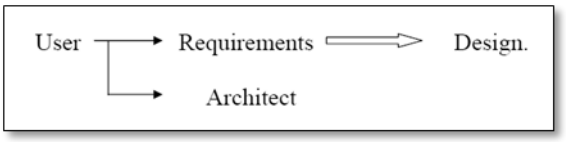

Fig. 4 High Level of Participating

3.2.5 Top level of Participation

In this level, the part of the architect does not exist. The user, who is the chief controller in the project, considers the requirements of ADP. In another manning architecture is without architect.

Fig. 5 Top Level of Participating

IV. Discussion

While in concept of participation, user can decide to participate in only one or in all the ADP stages together, there are several doubts in accuracy of self-selection present in these stages. On the other hand, there are five levels of user participation, which can help the architect and user decide the level of contributing in ADP of each unique project. However, by considering whole concept of self-selection from both sides of ADP, which means users' and designers' view, there are a few suspicion to accept these user participation's levels as levels of self-selection in ADP.

4.1 Stages of Self-selection

Recalling the new concept of self-selection in ADP shows that Planning and Designing stages of this process have high potential as the area of User Centered design (UCD). Without any doubt, UCD methods are one of the best ways of user contribution in order to receiving user's values and wants. Nevertheless, from the self-selection point of view, this paper is arguing the possibility of self-selection in Construction stage, which normally has been fixed in the first and second stages of ADP. The only case of an acceptable participation for Construction stage is to admit that these four stages are not dependent on each other.

However, in the last stage of this process, User experience (UX), which is important part of Evaluation stages, helps architects at first, to earn End User's Personalization (EUP) in their own place, and secondly to use this knowledge to the same future ADP with similar users or stakeholders.

4.2 Level of Self-selection

Certainly, it is possible to divide the level of self-selection in different parts such as five levels of user participation, but based on the scientific nature of ADP, without any doubt, architect must take the big role during the design process. This is the merely safe road to earning user's value and needs and using them in ADP.

In the first level of participation, there are no users to choose anything for themselves. Although by absence of user views, most of architects may happily want to follow only their scientific and artistic expression of architecture, for earning best results, user should be encouraged in contributing in, at least, the first stages of participation. Logically, zero participation means no level of self-selection.

In the second level of participation, a bold power of architect exists while contribution of users is weak. In the meantime, responsibility of architect to courage user for expressing their feels and desires is obvious. However, using UCD methods makes this level correct choice for getting high level of satisfaction from both sides in ADP.

In the third level of participation, absence of guidance because of equally balanced level of participation between user and designer leads the project to uncomfortable zone for both sides. It means the only solution is the capability of architects for managing various situations that ought to be considered. Consequently, this level would not right choice as level of self-selection in ADP.

In high levels of participation, user has the power to control every requirements and movements in ADP. It means that user claims that I have enough knowledge to make critical choices in the whole process of design and I do not need to have an architect beside myself. In other words, this level is the same as fifth level of user participation, in which architect does not exist. Subsequently, these last two levels mean Planning, Designing, Construction and Evaluation without any expert.

The only hope of receiving a desired result is that the user must be capable of taking the architect's responsibility. It means user has to be an architect. Finally, this assumption makes these levels as the first level of participation, which does not have an acceptable level of self-selection.

V. Conclusion

In previous studies, the concept of self-selection in ADP that has a strong connection with behavioral decision is guided by people values, needs and desires. Self-selection is a position in which users are allowed to choose and decide something for themselves. In finding of similarities with other existing definitions in design process, grounded on user wills, End User's Personalization (EUP) and based on scientific version of architect's obligations, User Centered Design (UCD) have the best characteristics to explain the unique position of self-selection in ADP.

Both self-selection and user participation are highlighting the user decision-making power and more importantly, the necessity of this contribute in ADP for earning the desirable process and product. Furthermore, several participation studies have emphasized that users have authority to play a part partially or totally in four stages of decisions making process in ADP, which is generally called as common duty of an architect.

Although rereading the main reason of introducing a new concept of self-selection in first place, which wants to highlight the lack of user selection in ADP, has nearest concern to user participation's idea, this paper argues to accept some stages and levels of user contribution in ADP as stages and level of self-selection. Founded on levels of participation some levels let user control all stages of ADP or at least have a significant role or an equal position versus the architect position. Logically, the absence of architect may influence the professional process, as ADP cannot ensure a correct result of user's desires. As result, the only suitable level of self-selection in ADP is the same level as low level of participation.

Besides, in Construction stage of user participation even with mentioning the main purpose of participation, which is to decrease the cost of building, self-selection of user ought to happen in Planning and Designing stages and to be fixed before starting Construction stage. Therefore, this paper discussed that all of the decision-making stages including the financial decisions, which effect the project cost have to takes place during the two early stages of ADP. In other words, no one should allow anyone to change any activities like user self-selection during Construction stage of the project.

Finally, this paper indicates the acceptable stages of ADP for happening self-selection are Planning, Designing and Construction stages. By using User Centered Design (UCD) methods in two early stages and collecting feedback from the end user of building in Evaluation stage by User experience (UX) methods or Usability methods in order to earn End User's Personalization (EUP), architect can use this knowledge in the same future ADP with the same users or stakeholders.

REFERENCES

[1] Torabi, M., Jusan, M. & Daneshpour. A. (2012). Self-Selection and Personalization in Architectural Design Process (ADP).6th SEATUC Symposium, King Mongkut's University of Technology Thonburi (KMUTT), Thailand.

[2] Torabi, M., Jusan, M. & Daneshpour. A. (2012). Effects of Self Selection in Architectural Design Process (ADP); Considering End User's Personalization (EUP). (ICITSBE 2012), Perak, Malaysia

[3] Torabi, M., Jusan, M. & Daneshpour. A. (2012). The Definition of Self Selection in Architectural Design Process (ADP): Based on User Centered Design (UCD) Method. (ADIC 2012), Malaysia.

[4] Torabi, M., Jusan, M. & Daneshpour. A. (2012). Effects of Self Selection in Architectural Design Process (ADP); Considering User Centered Design (UCD). (ICITSBE 2012), Perak, Malaysia.

[5] Schwartz, S. H. & Bilsky, W. (1987). Toward a psychological structure of human values. Journal of Personality and Social Psychology, 53, 550 562.

[6] Lakoff, G. & Johnson, M. (1999). Philosophy in the flesh: the embodied mind and its challenge to Western thought. New York, Basic Books.

[7] Online Dictionary, Available at: http://www.yourdictionary.com/self-selection.

[8] Online Dictionary, Available at: http://www.wordiq.com/definition/self selection.

[9] Wulz, F. (1990). The concept of participation. Participatory Design, Theory & Techniques. By Sanoff, Henry. United States: Bookmasters Inc, pp 39-48.

[10] Jenkins, P. & Forsyth, L. (2010). Architecture, Participation and Society. Routledge Ink, Taylor & Francis Group, London and New York.

[11] Cabe (2006). Better Public Building. Prime Minister's Award. Available at: www.cabe.org.

[12] Sanoff, H. (1990). Participatory Design, Theory & Techniques. United States, Bookmasters Inc.

[13] Ahmad Mohammed, A. S. (2006). Community Participation in Architectural Design, Evaluation of Al-Maageen Housing in Nablus. Master thesis, An-Najah National University, Nablus, and Palestine.

[14] Abbott, J. (1996). Sharing the City, Community Participation in Urban Management. London: UCL Press.

[15] Lawrence, R. (1990).Basic principles for public participation in house planning. Participatory Design, Theory & Techniques. By Sanoff, Henry. United States: Bookmasters Inc, pp 77-82.

[16] Lawson, B. (1980). How Designers Think. London: The architectural Press Ltd.

[17] Mikellides, B. (1980). Architecture for People, explorations in a new humane environment. Oxford: Aerofilm Ltd.

[18] Pehnt,W. (1988). Return of the Sioux. Buildings and Projects. By Kroll, Lucien. London: Joseph Masterson, pp.7-13.