Teaching Architecture Based on Life: Narrative-Oriented Approach in Design with Scenario Writing Method

Abstract

Attentiveness to human life and the presence and behavior of human beings are one of the main concerns in architectural design. In the interim, one of the proposed approaches in this regard is narrative-oriented and scenario-oriented thinking in architecture and its education. The purpose of the research is to investigate the role of scenario writing and its opportunities in the design training workshop. The current research, conducted in a semi-experimental way, is the result of reflection on the report of the teaching process in the architectural design workshop with the proposed topic of "Designing my villa". A number of architecture students of Tehran University participated in this research. "My Villa" design training was completed with the scenario writing method during six specific steps, each of these steps was taught in one session. In each gathering, a design test was taken from the participants to determine the changes in the scores of each stage compared to the previous stage. The results have been analyzed in two qualitative and quantitative sections. Data analysis was completed with the help of correlation t test and using SPSS version 22 software. The findings show there is a significant difference between the average scores of the design test in the pre-test and post-test stages ($P<0.05$). The type of scenario (spaces, activity, visualization of the context, etc.) influences the next steps. The percentage of people's tendency towards user-oriented ($\eta^{2}=0.69\%$) and event-oriented ($\eta^{2}=0.30\%$) approaches after scenario writing training has increased more than before. As a result, scenario writing training and related exercises have a positive feedback in advancing and facilitating the design process. Narrative-oriented approach with scenario-writing method in architecture describes the process of user-oriented design and introduces related theoretical and technical frameworks.

Research aims:

1. Inspecting the role of narrative-oriented approach in design with scenario writing method.
Exploring narrative-oriented thinking in life-based architecture.

Research questions:

1. What effect does the narrative-oriented approach with the scenario writing method have on architectural design?

2. What consequence does the scenario writing method have on the idea creation process in the design of architecture students?

Keywords: architectural education, narrative, scenario writing, architectural design, life.

Introduction

Today, a disconnection between life and architecture is noticed. The architect's concern should go beyond form and style and be in line with the story of human life that is based on habitation. Narrative-oriented thinking and the practice of scenario writing with its theoretical and practical background in the field of reading, creation and teaching of architecture are among the methods that seem to be able to be present and play a role in design education as a prelude to achieving life-based architecture (Nadimi et al., 2018). Based on this, the current research, considering the lack of attention to the quality of presence and life in space in architectural design training workshops, while investigating the well-known capabilities of "scenario writing" in the design process, seeks to recognize its strengths and positive effects in advancing the rudiments of problem solving and design process. In order to strengthen this issue. In fact, scenario writing is considered one of the strategies of teaching architectural design in the direction of user-centered design, which prepares students' minds to consider the relationship between audience and space (Tvedebrink & Jelic, 2018). In another research, Elliott introduces the structure of scenarios as a proposal for team design collaboration. The set-up can help students to discover new dimensions of architectural design and redirect the usual focus on form to a newer function. The results were unique and innovative compared to other educational classes. This research facilitates new insights and new perspectives of design thinking (Eilouti, 2018).

At the beginning, after the description of the upcoming problem, in the explanation of the reasons for choosing the scenario-based approach in design education, the meaning and concept of the
scenario and its relationship with life and architecture have been discussed; in continuation of the performance of students in the design workshop of Tehran University, the role of scenario-based education in the advancement of design and its related events in architecture education workshops are discussed.

The review of the background of the current research indicates that so far no independent work has been published with this title, however, Nadimi et al. in the study entitled "Architectural Design Education" have examined the role of architectural design education workshops in the category of narrative in design. However, in the aforementioned work, there is no mention of the scenario writing method in architectural design, therefore, in the present work, the subject has been investigated in a quantitative and qualitative manner, relying on statistical data and library resources.

**Conclusion**

In the scenario writing method, the designer tells a story that can be used to communicate the main features of the design. In general, design is a type of problem solving that can have different solutions. Since diverse factors are influential in the design and contains different stages and aspects, the scenario-based design solves design issues in a more integrated manner. In fact, writing the scenario by guiding the student to imagine what he/she has in mind, confronts the student with what they have in mind. Examining the scenarios written by the students show that aspects of the design have been emphasized in them, which have been revealed during the next steps and have made the salient and distinctive points stand out from others. Also, referring to the scenario during the design process can be effective in systematizing information and making decisions for the next steps of the process. Also, replaying the scenario of the designed space continuously in different stages of design is an effective way to strengthen the student's thinking in the workshop as it can reveal the strengths, weaknesses, defects and possible shortcomings of the design by imagining the presence of the audience in the space.

According to the opinions of Vander Linden et al. (2019), the main goal of architecture design is the users of the plan. Architects are expected to solve unlimited problems and challenges of society. Today, this goal has been neglected by designers due to the complexity of architectural design. In order to reach a more creative architecture and to go beyond the conventional language
of other architects, due to the similarities between scenario writing and architectural design, scenario writing can be used in space design. For example, an architect selects a scenario to solve a design problem, depending on the issue, the scenario shapes architectural spaces with the way of expressing images and content; also, through comparison with that scenario, the architect experiences a different design process.

Regarding the workshop instructors' analysis of the development process of designs, the design process has moved away from the dominant approach of formalism in the design studio and approached the spatial considerations in accordance with the real life, presence, behaviors and activities of the hypothetical audience. The findings of the present study show that students explain the space instead of the user. While in the university education method, generally the result of the design is the result of the experience of the designer. In response to the research question in the scenario writing method, more opportunities are provided to create ideas. By examining the characteristics of the scenarios and their influence in the design process and by comparing the scenarios with the design examples and students' works, the necessity of students' concentration and use of the scenarios is consistent with the first stage of idea creation in the current research. In addition, scenario writing has helped to produce new user-oriented and event-oriented concepts in architectural design. In the scenario writing method, students have achieved creative solutions to solve the challenges of each scenario.

Based on the analysis of the lecturers in the present study, from the comparison of what has been achieved with the objectives of the research and the analysis of the findings, along with all the positive roles of scenario-based exercises, weaknesses and damages can also be pointed out. Students with weak writing skills are not interested to participate in such exercises, some aspects of the plan remain in the form of imagination due to the lack of accuracy and comprehensiveness of the students' scenarios, the lack of a clear connection between the scenario writing exercise and the stages of development and payment of the plan directly and the possibility of placement scenarios in the path of unrealistic imagination are among these damages. Also, due to the time limit and the restriction of students' knowledge of the potential audience of the discussed space, and their conditions and requirements including age and sex, it has not been possible to match many aspects of life with the presence of the real audience of the project. Paying more attention to life is realized in limited aspects of what students' minds and imaginations have the ability to
Finally, according to the findings of the study, the effect of the scenario writing training process in life-based architectural design with a narrative-oriented approach in the design of Tehran University architecture students showed that the scenario writing method improved the process of creating ideas concerning design of the architecture students of Tehran University.

References


Ashraf Ganjavi, Mohammad Ali; Thaghafi, Mahmoudreza and Iranmanesh, Mohammad. (2018). "Effect of ambiguity and structural similarity of visual stimulus on students' design creativity". Safa magazine, 19(180), 11-12. [In Persian].


Karbasi, Atefeh. (2010). "Architectural design training houses (based on an experience)". Safa magazine. [In Persian].


Moghdisi, Neginsadat. Yaganeh, Mansour. (2018). "Explaining the memorable relationship of intra-city highways with the social spatial mental schemas of observers (case study: Modares, Chamran and Haqqani highways)". Hoyt Shahr, 17, 73-76. [In Persian].


Tully, R. (2012). Narrative Imagination: A Design Imperative; Irish Journal of Academic Practice, Vol. 1, Iss. 1, Art. 8; Available at: https://arrow.dit.ie/ijap/voll/iss1/art8.