

EVALUATING THE LANDSCAPE DESIGN OF 3RD GENERATION SPACES THROUGH A STUDIO STUDY



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Abstract

The transformation of the concept-form relationship into a concrete expression in the design experience, which is considered a challenging process, is one of the essential parts of this process. In this process, in which various methods are evaluated, the form seen as a communication tool occurs through distinct connotations. Within the scope of this study, students' search for form in a landscape design project problem, their connotations in the education process, and thus their solutions to the design problem were evaluated.

In the study, the studies of the students made during a semester were criticized in the presence of the coordinator. The concept of coffee and its associations in the landscape design of the 3rd Generation coffee sales unit in a campus venue, the sources they inspired and their final projects constitute the material of this study. The concept-form relationships of the projects were examined and, as a result, it was determined that it was easier for students to transfer certain formal objects to the projects in the search for form.

1. Introduction

Design is an activity that is based on creativity (Bonnardel, 2000; Simon, 1988), non-routine, defined, open-ended problem solving (Bonnardel, 2000) and requires multidimensional thinking, and the ability to connect different objects-concepts (Yılmaz et al., 2018) and one of its most important goals is to ensure a strong organization by creating harmony throughout (Alpak et al., 2018). Considered a high-level cognitive skill (Visser, 1994), it consists of a conceptual design stage and a process (Tang, 2002). The design process is a conversation between designers and design representations, with an emphasis on the interaction between cognitive actions and the works to be designed (Başar, 2013). The process is a unique knowledge production in line with the requirements of the problem (Yabanigül, 2021). In the design process, the designer determines the boundaries of the problem and generates ideas using analytical and creative approaches (Başar, 2013; Dorst, 2006) in line with a concept. Concrete or abstract ideas turn into forms and emerge as the first sketches of design (Howard et al., 2008). As a means of communication in design, form reflects thought (Erarslan, 2014). The pursuit of form can be articulated in various ways. In design education, particularly studio work, it is a detailed process that includes

many stages. In the environmental design process of landscape architecture, the relationship between concept and form is emphasized heavily in the construction of systems.

2. Literature Review

Goldschmidt (1997) states that the most important factor in shaping the final product in the design process is interpretation. The most important step in design is not to predict the features of a previously conceived product, but to design the form of that product. In sharp contrast to this, the transition of form to function indicates the fact that many scientific knowledge and methods are available, while the function of transition to form largely depends on the creative abilities and insight of the designer (Rozenburg, 1995). Yılmaz et al., (2018) draw attention to the significance of imitating nature in the transformation of ideas into forms in the search for solutions to the design problem in studio courses held in landscape architecture education, and they state that the abstraction approach facilitates the form creation process of the student and contributes to their analogical thinking ability. Analogical thinking aims to reflect the idea inspired by the transfer from the source of the selected idea in the search for a cognitive evaluation form (Casakin & Goldschmidt, 1999).

Özkan et al., (2016) emphasize that in design studios, particularly in first-year students' creativity and design process relationship, the concrete examples of the abstract concept make a positive contribution to the generation of ideas and the solution of the problem in the transformation of abstract expression into a product. In university education, the design process is completed with a conceptual approach to problem solving and a need to be recognized, and then an answer from various options is approved as a result of evaluation and interpretation (Gazvoda, 2002; Şentürer, 2004; Yaşar & Düzgüneş, 2013).

There are distinct stages within the design process. The most important of these is the availability of the system. The system setup in design is created by associating the designed elements with each other. System theory, which is the subject of many different disciplines, was proposed as the "general systems theory" by Bertalanffy in 1950 and argued that examining each event in relation to other events in a certain environment is more effective for understanding, predicting and controlling events (Alpak et al., 2018). In landscape architecture, the system, in its most comprehensive definition, is a result that aims to preserve the unity of the product consisting of a limited, physical or conceptual component and the relationship between them (Ackoff, 2010). The relationship between the theory of signs developed for the systems approach and the components and elements of the space emerges as syntactic function, semantic function and pragmatic function (Erdem Aksoy, 1975). The pragmatic function, which indicates that the users add meaning to the space through their experiences (Akkul, 1998), is that the formal expression responds to the user's needs (Alpak et al., 2018; Creswell & Clark., 2007). While the operant function, which constitutes the first stage and responds to user needs, aims to encapsulate aesthetics in a logical framework beyond the need for syntax (Morris, 1938). The aesthetic concern here is that it demonstrates a holistic approach by revealing the character unity of the visual elements (Stewart, 2007) and ensuring the harmony of the forms in terms of orientation and distance (Alpak et al., 2018; Regular & Alpak, 2020).

Many expert educators state that landscape design should be a process that enables the student to communicate with the field by activating perception, impression, observation, research, association, invention, knowledge, evaluation and many other intellectual processes, while at the same time, it should be a process that brings it to original forms with new arrangements (Bayramoğlu et al. al., 2019; Mumcu & Regular, 2021; Pazarlioglu Bingol, 2016; San, 2003; Yılmaz et al., 2018). In this context, a solution is sought for the problem of the Kır Kahvesi environment within a 14-week term in the Landscape Design Project I course at the Landscape Architecture Department of

Kastamonu University. During the course education period, students are expected to complete the concretization of the abstract concept through the relationship between the cafe space and the coffee connotations in accordance with a certain concept. This study is based on the landscape design projects designed according to the user needs of the cafe environment of first year students within the scope of the Landscape Design Project I course, in the design process according to the principles stated by Mumcu & Regular (2021) in the transformation of the concept idea into form, Alpak et al., (2018), Considering the syntactic and pragmatic aspects of the design of Regular & Alpak (2020), the training process was carried out in line with the information conveyed by the trainer. In this direction, the projects that reveal the relationship between connotation and form have been examined.

3. Material and Method

In this study, Kastamonu University Department of Landscape Architecture 2nd Semester "Purple Coffee and Its Environment" student projects (PTP I) were used. The area between the existing faculty buildings in the open green area system of Kastamonu University Kuzezykent Campus was designated as the study area. With the students who know the basic design principles and elements in their education, the study was carried out according to user needs for a total of 14 weeks.

A total of 8 students participated in the course, however only 3 projects were examined in this study. During the first 3 weeks of the course, conceptual studies on coffee, coffee sales units, and their environments were discussed and the analysis process of the natural, cultural and perceptual values of the study area was carried out. Within the scope of the course, more emphasis was placed on the connotations in the relation of the concept to the subject. During the 4th and 6th weeks, it was examined how the concept, which is associated with abstract expressions through coffee connotations, transforms into form in the design process and how it is associated with activities according to user needs. Between the 7th and 10th weeks, sketches were carried out in a system according to the basic design concepts of the form. In the last 4 weeks, the analysis of the spaces, depending on the system approach, was completed with sections and views of how the area looks.

4. Results

In the light of the information given in the studio work, the landscape design projects of 4 students who successfully completed the design process by associating them with association were examined.

In the first project, a student named Beyza focused on when, why and how to drink coffee, and in the answers to these questions, she evaluated coffee through the words "cold" and "chill". When these words were examined with their actions, they examined the hands and hand movements for warming up. Taking into account the curved structure of hand movements in the formal understanding, she tried to analyze the spaces and circulation using two intersecting arc forms.

It started the design process with the connotation of coffee and cold. In this process, he completed the outdoor seating and eating-drinking areas where the users could satisfy their coffee drinking needs, taking into account the unity of character, in line with the criticism of the lecturer (Figure 1). In the coffee-cold relationship, the student realized the warming theme with seating areas around the fire, and the chilling theme was realized with an understanding of ideas that would create an ice-like appearance in the material over urban equipment. In this concept, students focused more on games played using hands, and students created playgrounds where they can spend their free time and play games while enjoying coffee.

Figure 1. Coffee and cold themed project

Another project was directed toward a concrete expression through the words "bubble", "honeycomb" and "transparency" with the association of foams formed in coffee as a result of conceptual evaluations of a student named Eslem. In search of form, he attempted to incorporate the ideas of honeycombs and bubbles into spaces. While constructing the bubble and honeycomb expressions, he used in transforming the foam concept into form, he evaluated them with formal lines by emulating honeycombs in the activity and green area analyzes within the spaces. With the concept of coffee and foam, the student addressed user demands in seating, study and rest areas in the design process, as a result of the criticism given by the lecturer (Figure 2). While using the honeycomb expression in the formal form of the space, he evaluated foam and transparency in the cover systems of semi-open spaces.

Figure 2. Coffee and foam themed Project

The last project evaluated, by a student named Dilara, focused on coffee and its connotations, tachycardia, which is seen in people due to excessive consumption of coffee, and the design that was created using the words "heartbeat", "rhythm" and "movement", based on user needs and area analysis, eating-drinking areas, completed the study areas within the system (Figure 3). In his project, which began with the formal form of tachycardia, he tried to reveal the heartbeat through the spatial and circulatory

solutions. The idea of mobility, on the other hand, encompassed active activities that would provide movement as opposed to sitting and resting activities.

Figure 3. Coffee and heartbeat themed project

5. Conclusion

The concept, which is one of the most important stages in problem solving in landscape design project courses, and the transformation of this concept into a project is a challenging process. The creativity of the students and their perspective on the subject matter have a significant bearing on their ability to correctly comprehend and solve the problem. In this process, it has been observed that the student's construction of the concept and form relationship, and also giving direction in the application of the activity relationship, based on the associations facilitated the solution of the design problem. Similar to Yılmaz et al. (2018)'s notion that imitating nature provides benefits to students in the design process, it was observed in this study that association with the subject facilitated the student's form anxiety. It has been observed that concrete expressions guide the student's design faster, especially when the association becomes a form, and the concept is more readable in the search for problem-oriented activities. The outdoor use of these buildings should not only serve a functional purpose, but also provide social spaces suitable for usage by students and administrative-academic staff. In this study, a coffee shop was evaluated based on the concepts created with student-oriented coffee and its association in the landscape design process of the environment. Looking at the results, it is seen that the concrete and abstract connotations of coffee can be evaluated in terms of both formality and efficacy in the reflection of the project. In summary, it is thought that associations help the student to construct the relationship between form and activity in solving a landscape problem.

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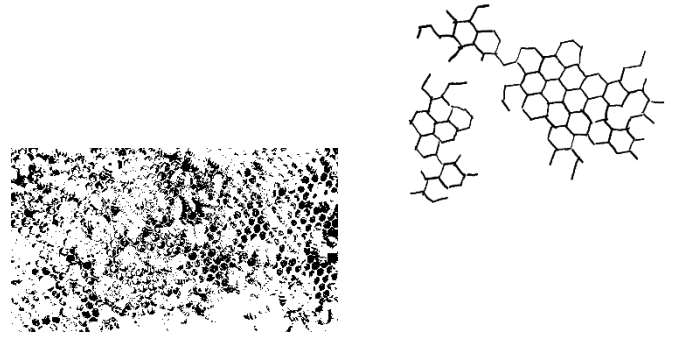


Figure 2. Coffee and foam themed Project

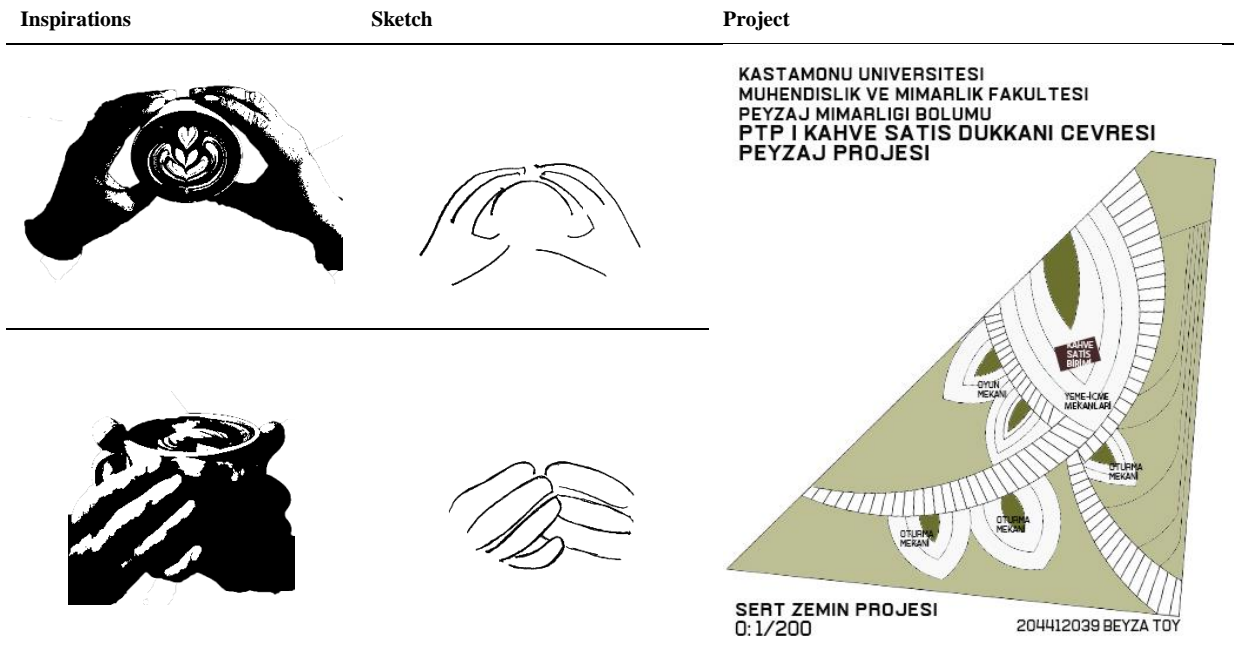
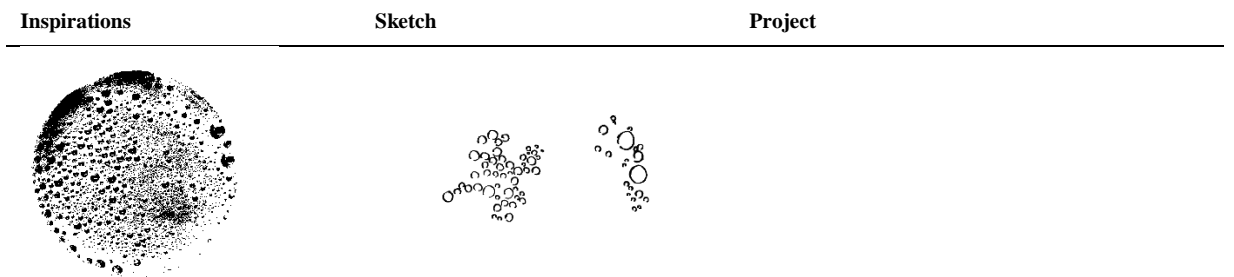


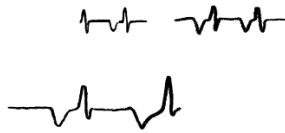
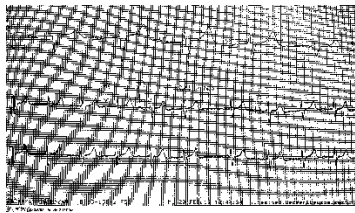
Figure 1. Coffee and cold themed project



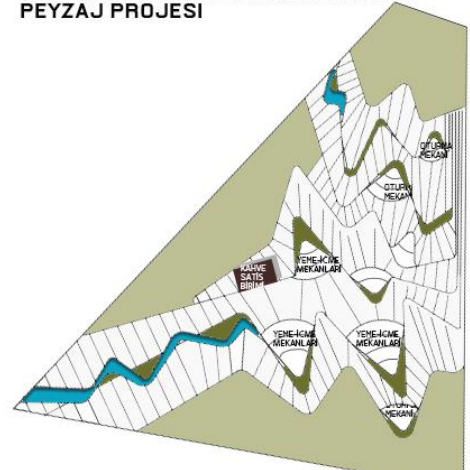
Inspirations

Sketch

Project



KASTAMONU UNIVERSITESI
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PEYZAJ MIMARLIGI BOLUMU
PTP I KAHVE SATIS DUKKANI CEVRESI
PEYZAJ PROJESI



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Figure 3. Coffee and heartbeat themed project