



Metaphorical Approach in Interior Architecture Education[#]

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ABSTRACT

In this study, the project studio, which is the foundation of interior design education, has been designed using the metaphor method, one of the intellectual methods applied in education. The metaphor method is a technique used to make difficult-to-understand abstract concepts concrete and helps design students develop their critical thinking and creative skills. In this case, design, which is the verbalized form of abstract thought, is limited to an object and the responsibilities brought by this object. From this point of view, an experimental study of metaphorical methods for establishing spatial relations of objects was carried out in a 14-week design studio with the 2nd year students of the Department of Interior Architecture, Faculty of Architecture and Design, Selcuk University. The purpose of the studio work is to draw the boundaries of interior architecture students in their search for solutions to design problems, and to enable them to come up with creative designs while making functional and formal decisions. In this context, a metaphorical approach was used in the context of object-space relations to guide students' formal decisions in the functional solutions of the problems that arise in the interior design process. After working in the studio, the students have developed a working doctrine that will guide their interior design studio projects using the designed method, allow them to create unique forms and shapes, enable them to translate abstract ideas into concrete space and make it possible for them to design at various scales, from equipment to space design. The method is at a level that will set an example for students, designers and academicians working in the design discipline.

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Introduction

Education in architecture and interior design is rapidly evolving in response to global economic, social, cultural, environmental, and technological advancements. Design studios, which are at the heart of design-based disciplines, are at the forefront of these developments. The objectives of design studios are to encourage creativity, foster the ability to produce forms, and help students integrate the formal, spatial, and structural knowledge they have learned in other courses to produce design solutions. For this reason, the changes in our age have caused design approaches in studios to be constructed with new/innovative methods. Numerous studies and pieces of research in the literature have shown how new methods and techniques used in studio lessons have contributed to education and students by helping people think creatively and turn their thoughts into ideas. Within the framework of this study, a program based on the metaphor method—one of the intellectual techniques used in education—was created. The metaphor method is a technique operated to

make difficult-to-understand abstract concepts concrete and helps design students develop critical thinking and creative skills. Designing, or the verbalization of abstract thought, is restricted to an object and the responsibilities that it carries in this context.

The studio work aims to define the parameters of the interior architecture students' search for a solution to the design problem and to give the students the tools they need to produce original designs when deciding on function and form. At this point, the students' form choices for the function solutions to the issues revealed during the interior architectural design process were guided by the metaphor method in the context of the object-space relationship. The physical and technical requirements were provided, the students who would be best suited for the program were identified, the program was introduced to the experimental group of the program to be tried, and an experimental study using the constructed metaphor method was conducted in a 14-week design studio per the determined program.

Studios in Interior Architecture Education

The project studio serves as the foundation for vocational education. Creating a continuous experimental environment with the involvement of all stakeholders is crucial in studio education that emphasizes problem-solving and discovery, as is integrating the knowledge and abilities learned in project studios and other classes at each stage of knowledge acquisition, knowledge transformation, and data transfer to design (Cordan et al., 2012). The design studio is regarded as the most significant component of architectural education in terms of both time and impact, according to Yürekli's definition. In this course, the logic of design starts to take shape, and the work done in the design studio is more intended to assess the design than to instruct it (Yürekli & Yürekli, 2004). It is a framework that adapts to the prior knowledge, way of thinking, and point of view of the person creating the design, and it becomes richer through conversations and interactions (Yürekli & Yürekli, 2002).

The use of different education models in architecture and interior architecture education is a well-known fact in education. Some pedagogical methods are effective to develop and make sense of the approach and method of the studio coordinator academician and his/her point of view on design. The aim of the design studios, which contain a lot of data and different information, is to reveal creativity, develop the ability to produce forms, and create design solutions by assimilating the formal, spatial and structural information obtained from other courses. For this reason, the changes experienced in our age have caused the design approaches in studios to be fictionalized with new methods. Among these, many different design methods such as the 9 square grid method, evolutionary design method, quick sketch method, block problem method, analysis method, text-form relationship method, informal education method, criticism method and metaphor method are used in project studio training. Among these methods, within the scope of the study, the study was carried out with the metaphor method.

Metaphor Method in Design Education

To comprehend and interpret architecture from the past to the present, extensive research has been conducted. In this way, various academic fields (such as philosophy, literature, history, and mathematics) contributed to the growth of architectural thought. Architecture's meaning is a multi-layered, intricate topic that is discussed from various angles, from person to person, from one culture to another, and in various settings. Architectural designs establish numerous relationships between formal constructs, semantic constructs, functional requirements, and historical and environmental references, among other things. It requires revealing the formal and conceptual essences in a sense to be able to interpret these hybrid relations. At this point, the discussion of the meaning of architecture in the 20th century started to revolve around the fictional and conceptual content of metaphors, which have since developed into common thought tools for architects (Demirkaynak, 2010).

The ancient Greek words *metaphrein*/*metaphora*, which mean to change, and *pherein*, which means to carry, are the origin of the word metaphor. It also appears in Turkish alongside the Arabic word *metaphor* (meaning bridge). Metaphor is described in the dictionary as "the imitation of the

qualities of a simple subject, phenomenon, or situation to a complex subject, phenomenon, or situation" (Oxford et al., 1998). It has been utilized scientifically in cognitive and clinical psychology with the claim that metaphors can be a means of expressing the mindset (Lakoff & Johnson, 1980) and mental modeling (Johnson-Laird, 1983). (Moser, 2000). Metaphors (Arnett, 1999) can be used to understand how people perceive and interpret concrete or abstract concepts and are thought of as a perception tool (Cameron and Deignan, 2006; Saban, 2006; Zheng and Song, 2010).

By using metaphors, the architectural object creates conceptual frameworks that help us comprehend the context and reality of architectural fiction. A communication that enables the transfer of the architectural object along with symbols, signs, and conceptual processes is proposed by the metaphorical approach. These days, a lot of architects use this communication as a "reference" when creating their design reality. The majority of architects began to view their creations as a form of discourse, creating new ways to communicate through architecture (Demirkaynak, 2010). The connection between the metaphor and the constructed object thus reveals novel approaches.

The experimental nature of understanding and interpreting architectural approaches makes the use of metaphors crucial. In architecture, one can approach everything as a metaphor, both concrete and abstract. However, the inability of abstract and concrete situations to be clearly separated from one another and the simultaneous occurrence of various metaphors in an architectural product are the factors that make it challenging to choose a categorical one (Ayran, 2002). As a result, various viewpoints are included in the categories on the concept of metaphor in architecture. The distinction Antoniadis introduced in his *Poetics of Architecture* (1997) can now be seen as the most fundamental. He classified metaphors into three categories, intangible, tangible, and combined.

With the expectation that more fruitful outcomes can be attained in the spatial form and be inspired more readily, the study's focus is restricted to the concrete metaphor approach. As long as it differs from the starting point and the finished product, the one-to-one reality used for concrete metaphors can serve its purpose. This is demonstrated by the fact that the concrete metaphor approach is widely used today with Santiago Calatrava's Turning Torso building, which is one of the significant architectural structures from a historical perspective (Picture 1). The term "Turning Torso" describes how the human body rotates around its axis (like a screw). The connection and division between Calatrava's initial metaphor and the finished object are based on the potent fiction of metaphor. For this reason, Abel frequently asserts that fresh ideas and imaginative reality must be distinguished from metaphorical roots and visual resemblance (Abel, 1997).

They can be found in two poles in architecture, based on rational and frequently ornamental poles, according to Abel's (1997) additional classification of the metaphorical approach. Berggrer suggested three categories for metaphors in this situation: structural, textural, and heterogeneous or pictorial. In this study, heterogeneous or pictorial metaphors that make explicit connections

between different visual images were used to describe visual sensitivity. Since these metaphors combine objective and emotive components, it is expected that new forms of spatial fiction will develop.

Gordon (1961) divides metaphors into two main categories, productive and inductive, and ornamental and descriptive, in a manner similar to Abel. Metaphors form the foundation of the “Synectics” theory of creativity. It aims to make the known unusual and the unusual to be known in the context of this theory. Because of this, he categorized the various uses of metaphors into four categories: individual, direct, symbolic, and reflective (fantasy). The symbolic metaphorical approach was used in the context of this study with the assumption that the experimental group would be appropriate for the proficiency scale. By compressing both physical and mental fiction at once, symbolic metaphors are used to express both. (Picture 2).

While the ‘Stretto House’, built in Texas in 1992, was designed by Steven Holl, it was intended to parallel the work Music for Strings, Percussion and Celesta composed in 1936 by Bela Bartok. In this example, the music taken as a source and the structure designed as a result show structural similarities (Bulu, 2018).

Material and Method

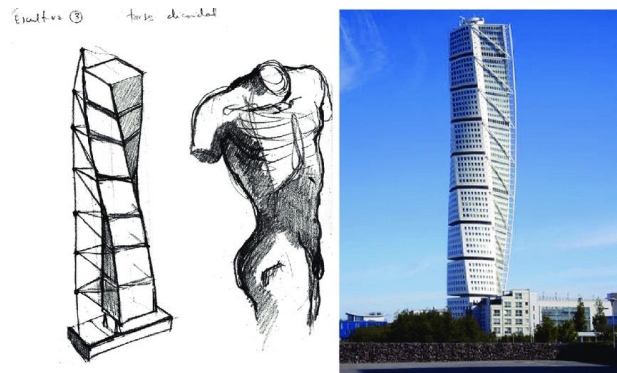
The metaphor method, which is one of the intellectual methods applied in education, was designed in the project studio, which constitutes the backbone of interior design education in this study. The metaphor method is a method that develops the thinking skills and creativity of design students and is used to make abstract concepts that are difficult to understand concrete. In this context, designing, that is, the verbalization of abstract thought is limited to an object and the responsibility that this object brings with it.

Students have the chance to develop emotional expression and self-expression, which is one of the criteria for creativity, through the metaphor method. Individuals are able to transcend their own limitations in this way. Students can develop a rich expression power by thinking creatively with the aid of this method, which is based on the concrete expression of abstract concepts.

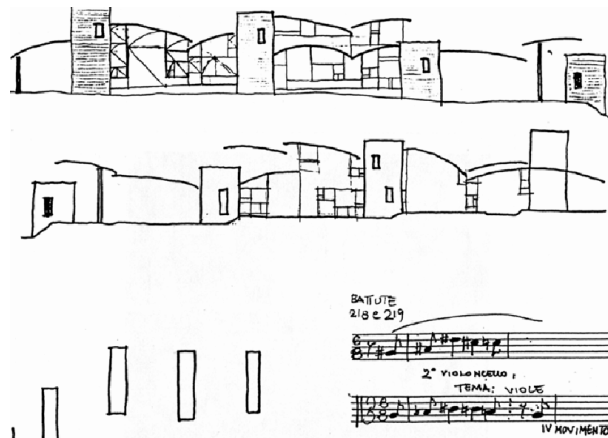
Architectural design studios have the capacity to foster an atmosphere of creativity. This context limits designing, or putting ideas into words, to an object and the responsibilities that go along with it. A background open-ended search and thought environment that is not directly related to the concrete form but also conceals the developments in the form exists in the design approach’s object-space partnership (Picture 3).

This study was conducted using an experimental methodology in the design studio with sophomore students from Selçuk University’s Faculty of Architecture and Design, Department of Interior Architecture, and the metaphor method, which constructs the object-space relationship. The studio work aims to define the parameters of the interior architecture students’ search for a solution to the design problem and to give the students the tools they need to produce original designs when deciding on function and form. At this point, the metaphor method was used in the context of the object-space relationship as a guide in the form decisions of the students in the function solutions for

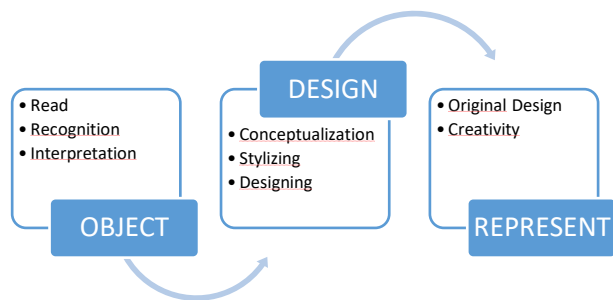
the problem revealed in the interior architectural design process. In the design studio, which was determined as a store project, they developed an original and innovative approach to the existing store concepts with the metaphor method, starting from an object they chose.



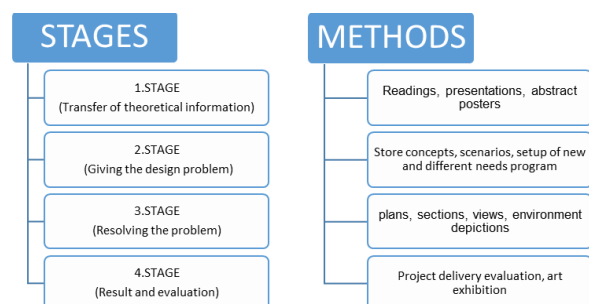
Picture 1. Turning Torso, Calatrava



Picture 2. The Relationship between the Bartok Artifact and the Stretto House Façade



Picture 3. Design Stages and Experimental Approaches: Object-Design-Representation



Picture 4. Metaphoric Approach Steps

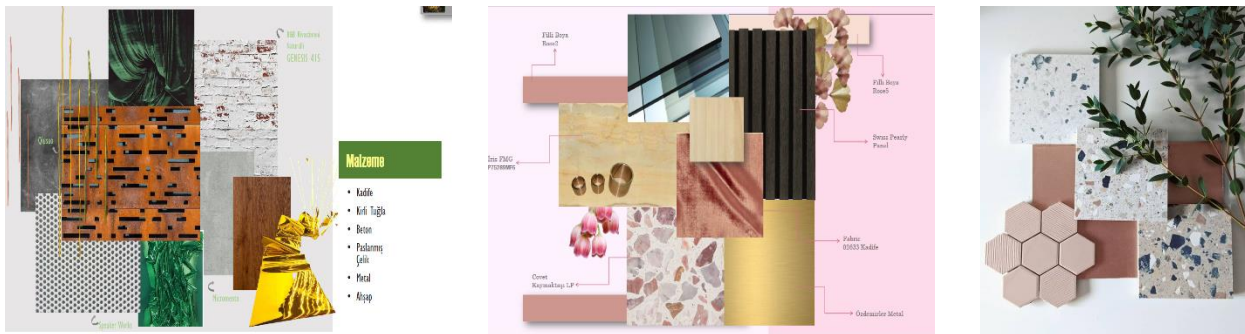
In the metaphorical approach, it is an experimental practice for interior architecture students to produce projects that will contribute to the development of their “exploration, information gathering, analysis and interpretation” skills in their projects. In this direction, the place and time for the implementation of the training program, for which the preliminary preparation was made according to the determined program, was specified, the physical and technical conditions were provided, the program was introduced to the experimental group following the program and the implementation started.

At this point, studio work was carried out in four steps (Picture 4). At every step, an effort was made to create a “studio environment” that would activate different ways of thinking and “develop the creative mind” (Readings, presentations, abstract posters, scenarios and sketches, reproductions of topography, scenarios on the store, setting up a new and different needs program, plans, sections, views, environment descriptions). Each step was evaluated by the jury (Jury 1, Jury 2, Final submission). The developed studio process was shared with the end-of-term virtual exhibition so that all students could understand the studio process and environment.

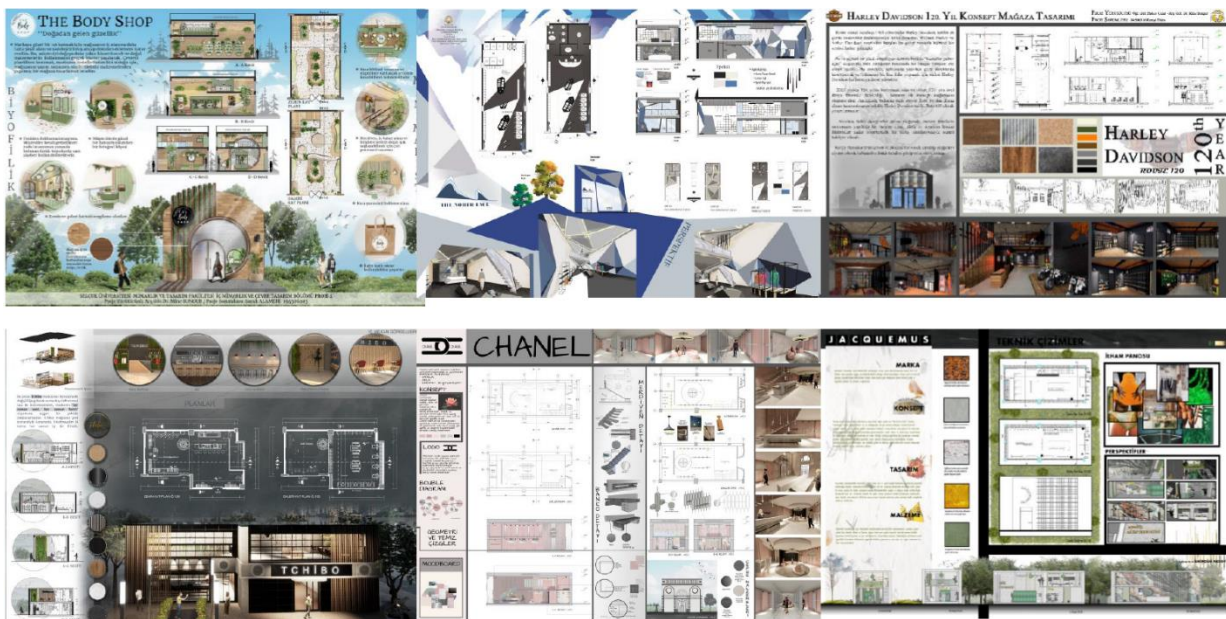
Interior Architecture Studio Work Example: Store Project

Over the course of 14 weeks, the studio work—which was done using the metaphorical approach method—was finished with in-class evaluations and critical processes (one semester). The constructed metaphor approach, which is the objective transformation of creative thinking on store projects, has emerged as a result of a creative process of producing creative form. After this dynamic process, designs were created from the design ideas, the connection between form and content that design education demands, and the three-dimensional forms that serve as the foundation for the development of the visual language. Conceptual approaches to current issues, including sustainability, ecological designs, sustainable materials, vertical agriculture gardens, and others, have been developed as part of the project work (Picture 5).

With six different examples of the project contents given in Picture 6, the metaphors that are created within the object-space of the project result products are listed below:



Picture 5. Sample Conceptual Approaches (Sungur and Çınar Personal Archive).



Picture 6. Sample Project Sheets in the Object-Space Metaphor (Sungur and Çınar Personal Archive)

Sarah Alameri created the motto of “Beauty from nature” in the “The Body Shop” store project, as a metaphor for the natural environment, natural content and biophilic design in the interior style. She has developed an innovative and sustainable approach to the store concept.

Nejla Canbulat Şahiner developed her project with a futuristic approach by using sharp-edged lines in the interior style she chose using the metaphor of mountain and ice in her ‘The North Face’ store project. With the color and material used in the interior design, the metaphor, which was constructed both as shape-form and texture, was reflected in the interior solutions.

Kemal Didin used the motto of “Eagles fly alone” and the metaphor of the eagle as a concept in the interior design of the “Harley-Davidson” store project. The store exhibited an industrial interior style by stylizing the eagle symbol in the materials and details used in the interior design.

Elif Nur Dursun used the coffee bean object as a metaphor in her ‘Tchibo’ store project. Reflecting the loft style in its interior design, it has reflected the color of the coffee essence to the texture of the space.

In the ‘Chanel’ store project, Elif Gonca Gencer used the current concept of simplicity and elegance with the lotus flower as a metaphor. In the project, it has adopted a modern-lux style in interior design by using neat geometric forms.

Emircan Aksoy has constructed the durian fruit in the ‘Jacquemus’ store project, with the egalitarian and libertarian attitude that the brand attaches great importance to, in a metaphorical relationship. He has used this understanding in interior design in a striking way with forms and colors.

Conclusion

Students can hone their skills and express their original ideas in design studios. Design studios are where students spend the majority of their time learning and discussing design techniques in architecture and interior design programs. Participation in class, peer sharing, an open-closed jury system, project critics as pedagogical tools, and feedback are all stages of the studio process. For both students and lecturers, the experiences gained in the studios are invaluable resources.

The sophomore students from Selçuk University’s Faculty of Architecture and Design, Department of Interior Architecture, participated in this study as part of an experimental methodology using the metaphor method, which constructs the object-space relationship. Below is a list of the accomplishments made possible by the metaphor method project process, which is the core of this article and is used in studio training:

- Students have gained the ability to develop a method using concrete concepts.
- By using the metaphor method, it has been possible to transform two-dimensional surface designs into three-dimensional volumes in interior design project works.
- Students gained the acquisition of shape-form, flexibility, aesthetics, arrangement, and classification-categorization from this studio experience, which is maintained with metaphor, which is used as an effective learning method.

- This method has helped students develop an awareness of how to solve architectural problems by allowing them to see tangible results from their conceptual thinking about the relationship between structure, space, and form.
- The students have created a working theory that, given the project’s topic, will allow corporate identity work. They are also capable of designing at various scales, from space design to equipment design.
- It was possible to observe the beneficial effects of the metaphorical approach and its impact on project problem-solving in the other semesters throughout the academic year.
- It served as a pedagogical tool for the project coordinator in the development of architectural formation in metaphor-based interior architecture education.
- The method allowed for an educational and emotional interaction between the student and the project coordinator.
- The approach is at a level where it will serve as an example for designers, academics, and students studying design.

In conclusion, the interior architecture students’ boundaries in the process of looking for a solution to the design problem were drawn during the studio work, and innovative designs were produced in the students’ decision of function and form. At this point, the students’ form choices for the function solutions to the issues revealed during the interior architectural design process were guided by the metaphor method in the context of the object-space relationship. About 50 different projects were created in the design studio, which was designated as a store project, by showcasing an original and innovative approach using the metaphor method based on an object they selected for the existing store concepts.

Thanks

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