Abstract

The primary purpose of this study is to show that works of art (painting, music, sculpture, literature, etc.) can be used as means of guidance for the designers, and triggering creativity. On the other hand, the secondary purpose is to prove the mettle art of calligraphy as a tool of guidance for the freshmen and a trigger for creativity in the context of basic design discipline.

During the fall semesters in 2015-2016 and 2016-2017, the main theme for Basic Design Course at Karadeniz Technical University, Department of Architecture was chosen and determined as “Anatolian Arts”. Within the context of the chosen theme, it was tried to reveal the potential relationship between “Anatolian Arts and Basic Design Elements and Principles”, moreover, the usability of Anatolian Arts as a tool of design.

Keywords: Design education, basic design, Anatolian Arts, calligraphy, metaphor

* Prof. Dr., Karadeniz Technical University, Department of Architecture. Trabzon, Turkey. E-mail: melek@ktu.edu.tr

** Assoc. Prof. Dr., Karadeniz Technical University, Department of Architecture. Trabzon, Turkey. E-mail: serapdurmsu@ktu.edu.tr

*** Prof. Dr., Karadeniz Technical University, Department of Architecture. Trabzon, Turkey. E-mail: abesgen@ktu.edu.tr
In this aim, from the whole semester, only one sample of practice has been chosen to put forward the hypothesis of relationship between arts and education increases the creativity in terms of basic design elements (dot, line, direction, shape/form, distance, size, proportion), for this study; a sampling through “basic design elements” with the “art of calligraphy” has been made. Within this hypothesis, the “art of calligraphy” and its characters were introduced briefly and this characteristic situation was questioned in the given design problems by means of “basic design elements”.

In short, this study, which exemplifies the state of calligraphy as a metaphoric tool in design education, focuses on the partnerships of calligraphy and basic design elements. Design elements such as “dot”, “line”, “direction”, “shape/form”, “distance”, “size” and “proportion” are reinterpreted in the context of the characteristics of calligraphy. Thus, the art of calligraphy has become a metaphoric tool.

**INTRODUCTION: DESIGN EDUCATION AND BASIC DESIGN STUDIO**

The rather complex nature of the design process, starting off as an idea and gradually evolving into a product, had hitherto been a domain of speculation among the educators. In this context, the researchers had been discussing and brainstorming on a number of concepts and topics concerning design education, including the concept of design, the act of design, creativity, skill, abstraction, problem-solving, concept, conceptualization, representation, thought and visual perception.¹

These concepts are crucial in the context of basic design education, and are often accompanied by the outcomes of a perspective considering “all disciplines of practical arts indispensable elements of a new form of architecture” (Conrad, 1991) as envisaged by the Bauhaus School, which had been the first venue to offer basic design education. In Turkey, most educational formations offer basic design courses based on the model which was first developed at Bauhaus, striving to provide insights into the act of design and foremost (Artun & Aliçavuşoğlu, 2009).

In this context, Gestalt Theory was also embraced by the proponents of Bauhaus School, and had been applied on the field of design, so as to provide the theoretical background of basic design education (Eryayar, 2011). The theory’s (Koffka, 1935) contributions in the domain of design are undeniable; yet Gestalt is also known to have its critiques regarding the contemporary design perspective (Erdoğdu, 2016).

¹ The following references can be examined for related topics; Arnheim, 1974, Arnheim, 1997; Goldschmidt, 1994; Salama, 1995; Durling, Cross, Johnson, 1996; Bell, 1996; Lawson, 1997; Gür, 2000; Durling, 2003; Moore, 2001; Oxman, 2006; Menezes, 2006; Çubukçu&Dündar, 2007; Kuloğlu, 2010; Köknar&Erdem, 2010; Tversky, 2011; Reinmuth, 2011; Tversky, Heiser, Morrison, 2013; Aydınlı, 2015; Erdoğdu, 2016.
Despite all the assumptions and questions involved, basic design education is a realm of existence in the curriculum at many design schools embodied with different perspectives. In the context of basic design education, students are oriented towards self-discovery, and the realization that the concept of design is naturally a part and parcel of life. During the courses on basic design, the students learn about the elements and principles of basic design, and the means towards the act of design, through Gestalt Theory. Yet another crucial goal of basic design education, in turn, is to instill the understanding that all senses should play active parts in the acts of perception and design (Beşgen et al., 2015). That is why arranging studio activities in a way to stir and mobilize all senses, and reinforcing awareness levels while doing so are crucial.

The basic design studio courses in Turkey, which hitherto had been based on the Bauhaus tradition and Gestalt Theory, are being implemented in different forms at different schools of architecture, based on the individual perspectives and innovative outlooks of those offering them. The common view is that the elements of basic design include dot, line, direction, shape/form, distance, size, proportion, texture, value and color; while harmony, contrast, repetition, symmetry, hierarchy, dominance, balance, and unity are the principles of basic design. Finally, the educators refer to the figure-background relation, good shape property, continuity-closeness, proximity, similarity, linearity and simplicity as the concepts of Gestalt Theory, (Koffka, 1935; Wertheimer, 1938, Denel, 1981; Gürer, 1990; Gür, 2000; Güngör, 2005; Pinna, 2010; Guberman, 2017).

Following the cases of design education and basic design studio -related to short and brief summary above- now, it is necessary to mention the strategies, methods and the means used in “Basic Design Anatolia Studio” at Karadeniz Technical University, Department of Architecture.

The basic design studio, which first started with Lütfi Zeren at Karadeniz Technical University, Department of Architecture started its education within the context of Bauhaus tradition. This tradition has been maintained for many years and the main idea of the studio has been preserved by the studio lecturers. An intellectual background/theme idea was put on the agenda of the studio after 2010, and the design problems in the context of basic design elements and principles were structured on changing and divergent themes each year: “concepts of architecture history”, “periods/movements/architects”, “contradictions/oppositions”, “metaphors” are some examples of the themes worked on.
However, in each selected theme, the status of art as a tool has been put on the agenda. In this context, it has been observed that using the fields of art such as literature, music, painting, cinema and theater ended with instructing, goal-oriented, interesting and successful results. Depending on the process summarized above, the basic design studio now incorporates different approaches to the program without departing from the Bauhaus tradition to keep up with creative developments in design.

The "Basic Design Anatolia Studio" sample, as the main theme of the academic years of 2015-2016 and 2016-2017, coupled with the choice to use "Anatolian Arts" as the tool to implement "Anatolia" theme (Durmuş Öztürk & Beşgen & Kuloğlu 2018). That choice was crucial for the lecturers in offering the studio courses; cause it’s main aim was not to mention the ability to come up with a new set of constructions rising on Anatolian Arts, but, to provide a platform trying to use of arts as a means, to construct a way to support creativity for freshmen, to obtain a gaining insights, and to bring a summary for understanding Anatolian culture and arts.

**CALLIGRAPHY ON TRACK TO BECOMING A METAPHORIC TOOL**

This study discussing the use of calligraphy –a leading form of Anatolian Arts– as a means in the basic design studio courses, also presents a number of reasons to choose this form of art among a wider range of Anatolian Arts, in the light of existing studies.

The conceptual parallels among basic design and calligraphy are noteworthy, but are often disregarded in studies on calligraphy. The present piece, however, is based on the few studies emphasizing conceptual similarities.

It is common knowledge that calligraphy is essentially a form of writing. In Islamic countries and societies, miniatures, illuminated manuscripts and calligraphy are often used as substitutes for painting.

Even though it is essentially a form of writing, calligraphy also denotes something more, as calligrapher Hüseyin Kutlu put it: "In calligraphy, text is no longer just a means to express knowledge. Expressing knowledge is actually the most basal feature of calligraphy. It has its spirit, virtually revealing the whole world of emotions.” (URL 1).

Pişgin defines calligraphy as “the symbol the belief in the oneness of God, as the basic doctrine of Islam, comes to exert on lines of word.” The reference to certain concepts of design is obvious in
the argument that the content conveyed through that symbolic text can be best expressed through "rhythm and geometry" (Pişgin, 2015; 56).

Yet another line of similarity between calligraphy and graphic design can be observed in the fact that Karahisari, a calligrapher, had been among the pioneers of a stylistic approach to calligraphy through an amalgam with graphic arts in an era where the latter was not known much (Nakilcioğlu, 2015).

Other scholars noted the fact that, in addition to the ability calligraphy as a form of writing provides in terms of understanding the thoughts of the artist, its aesthetic presentation capabilities are also noteworthy (Gürsu, 2015).

Boydaş argues that it is not possible to draw a clear line between calligraphy and painting, save for the former’s function to convey knowledge, and remarks that calligraphy can be considered a visual art alongside the meaning it entails or the message it tries to convey (URL 2). To Boydaş, calligraphy is the Islamic equivalent to the western art of painting, and adds aesthetic qualities to its religious contents and scholarly function. He even goes on and argues in his book that Islamic calligraphy is “painting, figure, form and even music” with reference to Nurullah Berk. Investing the relationship between Islamic scripture and other forms of art, Boydaş notes that fine calligraphy may have affected Islamic architecture as well, with its rules regarding arrangement, such as unity, proportion, size (module), rhythm, symmetry, and balance (Boydaş, 1994). In another piece, Boydaş writes; "Just like other plastic arts, calligraphy is also about sight and expressing what is seen. To grasp the plastic beauty of this form of art, one does not need to read it and to realize its spiritual charge... Compatible with abstract presentations as well, this form of script is shaped in the context of a plan that is continuous in horizontal, vertical and diagonal composition" (URL 3). He also notes that the horizontal and vertical elements of calligraphy maintain continuity and balance that the relationship between the whole and its parts is crucial, and the four basic elements of painting, namely dot, line, stain and color are basic elements of calligraphy as well. These concepts are elements of design.

Underlining the involvement of abstract expression, Cam sees an unlimited plastic domain in the existence of specific sizes for the letters, with variances allowed based on the composition, and argues that this freedom enables calligraphy to come up with new forms in every day and age (Cam, 2013; 36).
Pekpelvan, in turn, has the following to say on calligraphy’s abstract language of expression: “It is evident that Islamic arts are dominated by the ‘abstract-abstracting’ approach that is completely disconnected from the physical world beyond even the slightest evocation of and without any objective equivalent in the latter, not to mention a symbolist approach conveying thought through indirect means. The already abstract forms of Islamic calligraphy have been revised to come closer to the goal of achieving a more accurate and more aesthetic representation on each occasion, far from the perceptions and thoughts which would bring the artist to the forefront, and impair the quantitative chain” (Pekpelvan, 2009; 71).

Writing on calligraphy, Ufuk Alkan notes the following: “The calligrapher tries to draw and portray the letter, trying to approach its absolute form. He scribes and draws not a known object of the physical world, but the letters which are not part of the physical world, and the relationships between those letters... The philosophy of calligraphy is closer to that of contemporary art education. It employs the elements of form (dot, line, stain, distance, direction, form, color, texture) which are indispensable for the appearance of plastic arts. The affinity and parallels between calligraphy and painting arise at that point” (URL 4).

It is also frequently noted that calligraphy had a certain influence on western artists, and that certain artists benefited from some forms of calligraphy, such as the cufic script, when developing their own works (Boydaş, 1994; Pekpelvan, 2009; Cam, 2013). The calligraphy’s potential to serve as a foundation or reference for other forms of art is evident in this context.

In the light of these information, one can forcefully argue that calligraphy entails abstract narratives, produces works of art, and establishes meaningful relationships with the concepts of design. Thus, it is possible to argue that calligraphy can evolve into an authentic and creative design tool, through inspiration and interpretation.

In this context -given the justification provided above-, the lecturers offering the studio courses decided to include calligraphy among the Anatolian Arts to be covered in the “Basic Design Anatolia Studio” for two years in a row. This decision is based on the abstract style involved, the visual art status of calligraphy, the inspiration it provided for certain abstract pieces of art, the rich intellectual contents involved, conceptual similarities and so on.
Once these grounds for the decision are described as such, one can proceed to investigate the “metaphoric tool” status of calligraphy. In this aim, one of the goals of the basic design studio courses is to explain and understand the “art’s ability to serve as a tool for design”, and to do so, one first needs to understand the concept of metaphor.

Phrases or concepts used to denote meanings other than their conventional ones, through an association or analogy, are called metaphors. The word “metaphor” used in western languages has its roots in French (Hançerlioğlu, 1993).

Usually it is perceived as a word denoting an analogy, but it is also distinct from simple analogies. Metaphor is used to express an issue through another form. Metaphor refers to figure of speech serving to establish analogies, comparisons and descriptions between two things (Hançerlioğlu, 1993).

Lakoff and Johnson (2015) claim that metaphor is used widely not only in daily life, but also in language, thought, and action, and thus our system of concepts is mostly a metaphorical one. In contrast to the conventional perspective of metaphors, Lakoff and Johnson developed a new understanding of metaphors, called cognitive-linguistic conception, based on the claim that metaphors often are not built on analogies, but represent innate qualities of concepts rather than words. Yet, in the end, Lakoff and Johnson note an agreement with the basic views of the comparison theory, and thus claim that metaphors can be based on isolated similarities. Against this background, they also note certain differences from the comparison theory: “The primary function of metaphor is to provide a partial understanding of one kind of experience in terms of another kind of experience. This may involve preexisting isolated similarities, the creation of new similarities, and more” (Lakoff & Johnson, 2015; 202).

Lakoff and Johnson’s (2015; 30) discourse about the essence of metaphor being the “understanding and experiencing one kind of thing in terms of another”, viewed in the light of the abovementioned remarks, leads to the clear conclusion about the metaphoric tool function of calligraphy in design education. If one is to interpret the intellectual structure and visual outcomes of calligraphy, as an experience, the new similarities derived will certainly benefit from the means made available through this experience. Therefore, making good use of especially the visual experiences of calligraphy can be crucial. In a nutshell, understanding and experiencing design elements (one kind of thing) with the help of calligraphy (another thing) arises as a
metaphorical case, rendering calligraphy a metaphorical means to understand and interpret design.

Thus, the visualization provided in Table 1 shows the relationship between calligraphy and design in the context of figural metaphor.

Table 1. The relationship between calligraphy and design in the context of the former’s use as a metaphorical tool. (*, **)
Table 2. Basic Design Anatolia Studio Program, (Durmuş Öztürk, Beşgen, Kuloğlu, 2018; 469)

<table>
<thead>
<tr>
<th>Anatolian elements/concepts/arts</th>
<th>Program of the Basic Design Course</th>
<th>Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>CALLIGRAPHY</td>
<td>Dot, Line, Direction, Shape/Form, Distance, Size, Proportion</td>
<td>Basic Design Elements</td>
</tr>
<tr>
<td>PAPER MARBLING</td>
<td>Texture</td>
<td>Basic Design Elements</td>
</tr>
<tr>
<td>TILE</td>
<td>Value and Color</td>
<td>Basic Design Elements</td>
</tr>
<tr>
<td>MINIATURE</td>
<td>Good Shape Property, Continuity-Closeness-Symmetry</td>
<td>Gestalt Perception Theory</td>
</tr>
<tr>
<td>SHADOW PUPPETRY</td>
<td>Depth, Transparency, Overlapping, Measurement Gradation</td>
<td>Gestalt Perception Theory</td>
</tr>
<tr>
<td>PUPPET</td>
<td>Figure-Background Relationship, Depth, Transparency, Overlapping, Measurement</td>
<td>Gestalt Perception Theory</td>
</tr>
<tr>
<td>KARAGÖZ</td>
<td>Gradation, Linearity, Effective Environment</td>
<td></td>
</tr>
<tr>
<td>LIGHT COMEDY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PUBLIC STORYTELLER</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CARPET</td>
<td>Repetition/Symmetry/Harmony/Contrast</td>
<td>Basic Design Principles</td>
</tr>
<tr>
<td>ORNAMENT/MOTIF</td>
<td>Hierarchy</td>
<td>Basic Design Principles</td>
</tr>
<tr>
<td>ANCIENT PERIOD CITIES</td>
<td>Dominance/Balance/Unity</td>
<td>Basic Design Principles</td>
</tr>
<tr>
<td>ANATOLIAN DOORS</td>
<td>Dominance/Balance/Unity</td>
<td>Basic Design Principles</td>
</tr>
</tbody>
</table>

In the light of the above explanations, the use of calligraphy as a tool to develop creativity within the studio constitutes the sample of this study. The problems related to the art of calligraphy due to the compatibility of the basic design elements of the program; dot, line, direction, shape/form, distance, size, proportion was found to be appropriate for the subjects. The prepared problems were written in such a way that the characteristics of the art of calligraphy could be used, and the students were expected to interpret the problem given within the scope of the basic design elements and principles (Table 3).
Table 3. Problems proposed for Calligraphy and Basic Design Elements

| Exercise 1 | Topic: DOT-LINE-DIRECTION  |
| Problem: Please interpret the crucial elements of Anatolian Culture, namely the PLURALITY and/or UNITY concepts, in your area of studies, making use of the insights you developed with the help of the research assignment you performed and brought along. In your composition use DOTS, LINES, and DIRECTION as the design elements. Make sure that the design elements are composed on the basis of the characteristic narrations provided in the CALLIGRAPHY examples you have researched and presented to you during the class. |

| Exercise 2 | Topic: DISTANCE-SIZE-PROPORTION-SHAPE/FORM  |
| Problem: Interpret the CULTURAL DIFFERENCES concept in your area of study, based on the knowledge you have acquired through the research assignment you performed and brought along. Describe your area of study from a horizontal and vertical perspective, as required for your composition. In your composition use DISTANCE, SIZE, PROPORTION, and SHAPE/FORM as the design elements. Make sure that the design elements are composed on the basis of the characteristic narrations provided in the CALLIGRAPHY examples you have researched and presented to you during the class. |

BASIC DESIGN ANATOLIA STUDIO WORKS

The results of the “Basic Design Anatolia Studios” tried for two years in a row, are shared in various settings, with reference to examples based on various forms of art (Durmuş Öztürk & Beşgen, & Kuloğlu, 2018). The present essay, in its turn, aims to discuss the relationships established between calligraphy and the basic design studio, as well as the results achieved.

The studio was based on the following process: First of all, the students were provided a theoretical introduction into basic design doctrines, with the assistance of general images. Thereafter, the conventional and modern interpretations of calligraphy were discussed with reference to various calligraphers. Throughout the process, the students were expected to develop a grasp of the abstract aesthetic structure of calligraphy, and use it as a tool for design. In this context, leading calligraphers and their works were presented, with a specific focus on calligraphers who are also architects. Leading names which were discussed include, among others, Sheik Hamdullah, Ismail Zuhdi, Ahmed Shamsaddin Karahisari, Mustafa Halim, and Ali Toy.

The comments of architect-calligrapher Ali Toy are crucial in terms of grasping the objectives of the studio. Toy has the following to say about the mode of interpretation of calligraphy: "I write the script with some improvements on traditional styles; I thus develop mixed styles. Furthermore, I create authentic products using nothing but basic forms of geometry" (URL 5). His views on modern calligraphy, in turn, can be summarized as follows: "Of course calligraphy is used for writing Holy Scripture..."
as well. But in essence, calligraphy is the art of scripting based on certain rules, not the art of scripting holy texts. Furthermore, the classical examples of calligraphy are actually inventions by the Ottomans. They cannot be found in other Islamic countries. Calligraphy always goes through renovations and transformation. Classical calligraphy also goes through a continuous cycle of development. I believe that a straight line has a more emphasized effect. Modern calligraphy is not a deformed or improved version of the classical script. These forms are completely new ones. They can be considered the architectural designs of calligraphy” (URL 6). The artist’s works presented in Table 4, along with many others which cannot be shown in the confines of an essay make the relationship between art and design apparent.

Table 4. Examples of Ali Toy’s works (https://www.ketebe.org/en/artist/ali-toy-2095)

Once theoretical groundwork was presented to the students, they were asked to work on the problems (exercise 1 and 2) expressed in Table 3, leading to the products by the students. At this junction, some examples developed by the students within the framework of the Basic Design Anatolia Studio, and the extent to which the original goals of the studio were achieved, are discussed.

The tables presented provide cases to discuss the metaphoric tool capabilities of art, with reference to selected works by the students. The design works produced by the students within the framework of the studio were interpreted, assessed, and with reference to “calligraphy's ability to serve as a metaphoric tool” in “basic design”. (Tables 5-6)

Table 5. Students’ works on “Plurality / Unity” (Exercise 1) (1) Buşra Kurban (2) Zehra Doğuzparmak (3) Reyhan Sakallı (4) Yaren Sözên (5) Fethican Yıldırım
The students were expected to come up with designs using the concept “Plurality and/or Unity” deemed to represent Anatolia, and the art of calligraphy as metaphorical tools (Table 3). All works produced exhibit the characteristic features of calligraphy, as well as effective use of basic design elements, in the process of converting calligraphy -another kind of thing- to a design product -a given kind of thing- using basic design products (dot, line, direction).

If samples are analyzed from left to right (Table 5) according to the problem specified in Exercise 1, the following can be said; The basic design element selected in the composition (1) is; line. The organic character of the line in the traditional calligraphy art is the main idea of the design. In the composition (2), dot, line, and direction elements were chosen for the composition, but the direction element was dominant in the design. It is seen that these elements are used in the composition by taking advantage of the calligraphy character. In the composition number (3), Boydaş (URL 3) emphasizes that "line is the horizontal and vertical elements of calligraphy which provides continuity and balance". The horizontal and vertical use of the line is evident. In the composition numbered (4), similar to the study number (1), it was created by using the organic character of calligraphy. In this design, the geometric line character was used as a ground effect and the point element supported the composition. The lean and determined attitude seen in the composition provided the balance of the composition and the emphasis on calligraphy was an abstract expression like the works of calligrapher and architect Ali Toy.

Table 6. Students’ works on “Cultural Differences” (Exercise 2) (1) Sude Bilgin (2) Nurten Gökçek (3) Gizem Sanyılmaz (4) Sümeyra Öztürk (5) Cansu Mersinlioğlu

The students were expected to transform the concept of “Cultural Differences” under the influence of a multitude of cultures which co-existed in Anatolia for centuries, to design, using calligraphy as metaphorical tool. All works produced exhibit the characteristic features of calligraphy, as well as effective use of basic design
elements, in the process of converting calligraphy -another kind of thing- to a design product -a given kind of thing- using basic design products (distance, size, proportion, and shape/form). The case visualized in Table 6, in other words “art’s ability to function as a metaphoric tool for the design product” can be seen clearly through these works.

If the samples are examined from left to right (Table 6) according to the problem specified in Exercise 2, it can be said that the basic design element selected in the composition (1) is the line. The formal character in calligraphy seems to dominate the composition. In the composition (2), the basic shape chosen for the composition was square. Other forms have been organized to differentiate each frame. The main element of this design is the form. In the composition (3), not only the shape element, but also the distance, dimension and proportion elements are dominated in the composition. The perception created reflects the characteristic features of calligraphy. The composition number (4) is perhaps one of the most successful compositions to use the art of calligraphy as a metaphoric tool. The chosen shape, the colors used and the use of the work area make the composition different from the others. The composition number (5) uses rectangular shapes to create a line effect, bringing together three square shapes. Measurement and spacing elements were also used in the study in a balanced way, and the use of the line art as a tool was also clearly demonstrated.

The impression obtained from these studies can be summarized as follows; the use of calligraphy as a tool in achieving such a characteristic level has a significant effect. The problems of understanding the basic design elements (dot, line, direction, shape/form, distance, size, proportion) have been addressed in this context and the students' perspective on design has been changed and the creativity impulses have been triggered.

CONCLUSION

This study, which exemplifies the state of calligraphy as a metaphoric tool in design education, focuses on the partnerships of calligraphy and basic design elements. Design elements such as dot, line, direction, shape/form, distance, size and proportion are reinterpreted in the context of the characteristics of calligraphy art.

Groups of works show that “calligraphy” providing a means to develop extremely authentic designs, would provide guidance for “design”. Moreover, Lakoff and Johnson’s (2015) argument about “understanding and experiencing one kind of thing in terms of
another" describing, in their vision, the essence of metaphor, with reference to visual arts and design phenomena, was thus tried and seen to be successful. The studio products and experience conveyed within the framework of the present study suggest, in a sense, the ability of works in any field of art (e.g. painting, sculpture, music, poetry) to serve as metaphorical tools to shed light for the process of design.

Basic design studios, which support the architectural project studios universally, deemed the essence of design education, clearly need new outlooks and new perspectives alongside the pre-existing theoretical and practical experiences involved. The Basic Design Studio team at Karadeniz Technical University Department of Architecture, in its turn, maintains its efforts for an innovative outlook, through programs designed from different perspectives year over year. The goal is to share the experiences and products which may contribute to the design environment, with the wider academia, in the form of experiments with various tools, means and methods, with a view to providing examples for youth who join the ranks of academia.

REFERENCES


Bauhaus’un Programı”, Translation: Dr. Sevinç Yavuz, Şevki Vahşi Mimarlık Vakfı, (37).


Durling, D., Cross, N. & Johnson, J. (1996). Personality and learning preferences of students in design and design-related disciplines, Edge Ltd. and The Open University, IDATER 96 Loughborough University.


URL-2 İslam Yazısında Ön-Arka Yapı ve Soyut Sanat-Nihat Boydaş,
Resume

Nilgün Kuloğlu born in 1963, in Ankara, Turkey. She graduated from Karadeniz Technical University, Department of Architecture, in 1984. She received her master degree in 1987 and completed PhD. thesis in 1994 at the same University. She worked in order to prepare conference, exhibition and competition at Karadeniz Technical University, Department of Architecture on different years. She still works as a Prof. Dr. at Karadeniz Technical University, Faculty of Architecture-Department of Architecture and continues professional activities at the same university. She leads the “Basic Design”, “Design Studio”, “Environment and Behavior Science” and “Theories and Concepts of Architecture” at undergraduate and postgraduate levels.

Serap Durmuş Öztürk is an Assoc. Prof. Dr. at Karadeniz Technical University, Department of Architecture in Trabzon, Turkey. She received her B.Arch in 2006, MSc. in 2009 with the thesis “A Deconstructionist Reading in Religious Spaces: Shah Faisal Mosque” and PhD. in 2014 with the thesis “A Rhetorical Construction of Architectural Thought: Usûl-i Mimârî-i Osmâni” degrees in architecture from Karadeniz Technical University (KTU), Faculty of Architecture. She was awarded Ibn Rushd (Averroes) Award of Merit in Social Sciences (USOS Congress, Malaga/Spain) in 2017 and the Serhat Ozyar Young Scientist Award for Social Sciences with her PhD thesis in 2015. Her major research interests include rhetoric, architectural theory, deconstruction philosophy and re-reading for architecture. She leads the “Architectural Design Studio”, “Basic Design Course”, “Introduction to Architecture” at
undergraduate level and “Rhetoric in Architecture”, “Theoretical Construction of Architectural Thought” postgraduate level.

Asu Beşgen is a Prof. Dr. at Karadeniz Technical University, Faculty of Architecture in Trabzon, Turkey. She received her Master Degree with the thesis; “The Effects of Cubist Movement on Modern and Post Modern Architecture” and her Bachelor Degree with the thesis on “Concept, Conception, Conceptual Analysis in Aesthetics and Architecture” from the same university. She leads the “Architectural Design”, “Interior Design” and “Basic Design” Studios, teaches the courses of “Theories and Concepts of Architecture”, “Aesthetics”, “Theory of Art”, “The Dialog of Art and Architecture in 20th Century”, “Cinema and Architecture” at undergraduate and postgraduate levels.