

## Basic Design Workshop Experiences from Thought to Object, from Abstract to Concrete: Texture



Assoc. Prof. Dr Pınar KISA OVALI<sup>1</sup>, Lecturer Dr. Bilge ATAÇ ÖZSOY<sup>2</sup>  
 Trakya University, Faculty of Architecture, Edirne, Türkiye  
 Trakya University, Faculty of Architecture, Edirne, Türkiye  
 pinarkisaovali@trakya.edu.tr, bilgeatac@trakya.edu.tr  
<https://orcid.org/0000-0002-6230-219X><sup>1</sup>, <https://orcid.org/0000-0001-7259-4387><sup>2</sup>  
 Received: 27.11.2024, Accepted: 07.12.2024  
 DOI: 10.17932/IAU.ARCH.2015.017/arch\_v010i2002

**Abstract:** This article aims to evaluate and investigate the student achievements as a result of different applications of the 'texture' element in the workshops conducted within the scope of the basic design course, which forms the basis of architectural education. Different applications made within the scope of the 'texture' element in the Basic Design I course of spread over a period of ten years (2013-2023) constitute the subject of the study. This study, in which the place and importance of 'texture' as one of the ways of enabling architecture students to gain a new understanding by developing their thought system and creativity, is investigated by comparing different method constructs; It is evaluated through the applications titled 'inductive and deductive texture', 'texture in the footsteps of famous painters' and 'texture in the creative process'. As a result of the study, it was determined that 'texture' in deduction, induction, recreation and creative processes, the limits imposed on the student at the design stage create a partial restriction on creativity, but do not limit creativity in texture products, rational knowledge together with the creativity of the student, Rational knowledge is combined with the student's creativity, intuition and experience, allowing an original approach to be developed for each new product in a continuous feedback process. It also demonstrates the need to question and re-evaluate the traditional teaching methods used in basic design courses and to broaden the student's perspective.

**Keywords:** Basic Design, Texture, Deduction, Induction, Architecture Education

### Düşünceden Nesneye, Soyuttan Somuta Temel Tasarım Atölye Deneyimleri: Doku

**Özet:** Bu makale mimarlık eğitiminin temelini oluşturan temel tasarım dersi kapsamında 'doku' ögesinin farklı uygulama yöntemleriyle atölye çalışmaları sonucunda edinilen öğrenci kazanımlarının değerlendirilip sorgulanmasını amaçlamaktadır. Temel Tasarım I dersinde 'doku' ögesi kapsamında yaptırılan ve on yıllık sürece yayılmış (2013-2023) farklı uygulamalar çalışmanın konusunu oluşturmaktadır. Mimarlık öğrencisinin düşünce sistemini, yaratıcılığını geliştirerek yeni bir anlayış kazanmasına olanak sağlama yollarından biri olarak 'doku' ögesinin yerinin ve öneminin farklı yöntem kurgularının karşılaştırılması yolu ile araştırıldığı bu çalışma; 'tümevarım ve tümdengelim doku', 'ünlü ressamların izinde doku' ve 'yaratıcı süreçte doku' başlıklı uygulamalar üzerinden değerlendirilmektedir. Çalışma bulguları olarak; tümdengelim, tümevarım, yeniden yaratım ve yaratıcı süreçlerde 'doku'nun, tasarım aşamasında öğrenciye konulan sınırların yaratıcılık üzerinde kısmi kısıt oluşturduğu ancak doku üretimlerinde yaratıcılığı sınırlamadığı, rasyonel bilginin öğrencinin yaratıcılık, sezgi ve deneyimleriyle bir araya gelerek sürekli bir geri besleme sürecinde her bir yeni ürün için özgün yaklaşımın ortaya çıkmasına olanak sağladığı belirlenmiş olup, sonuçları itibarıyla temel tasarım dersi kapsamında klasik eğitim alışkanlıklarının sorgulanarak yeniden değerlendirilmesi ve öğrencinin bakış açısının genişletilmesi noktasındaki gereklilikleri de göstermektedir.

**Anahtar kelimeler:** Temel Tasarım, Doku, Tümdengelim, Tümevarım, Mimarlık Eğitimi.

### 1. INTRODUCTION

This article discusses the relationship between the concept of texture and architectural education, focusing on creativity, awareness and attention. The overall aim is to enable free choices to be made using texture, to draw attention to ways of approaching design and to develop awareness in the design process. Dufrenne (1973), who sees aesthetic experience as a way of helping individuals to see the world and themselves in new ways, emphasizes the rich variety of emotional impressions, feelings and expressions that aesthetic experience encompasses [1]. As a concept, texture is an inescapable part of everyday life and architectural education with the aesthetic experience it provides. Merleau Ponty (1995) emphasizes that not everything can be communicated verbally, describing this situation as a 'silent and veiled language' by saying that 'some things cannot be described because they exist in a way beyond what can be described'. However, he also states that this silent and implicit language can be revealed through visual traces in different types of art forms such as painting, sculpture and photography [2]. This evaluation indicates that aesthetic experience is characterized as a process through which individuals gain new insights into themselves and the world around them. It also suggests that architectural students may benefit from a freer view, attention and awareness in the design process. In order to facilitate comprehension of the significance and value of textures in the context of architectural education and to provide students with the opportunity to explore the diverse applications of texture through design, the studies conducted at the Trakya University Basic Design Workshop are evaluated within the scope of this article. Consequently, new insights into the various techniques and methods employed in the creation of textures are developed, offering a valuable contribution to the field of architectural education.

### 2. RESEARCH METHODOLOGY

The principal objective of this study is to provide an understanding of the significance of texture in the context of basic design education, employing a range of pedagogical approaches. Additionally, the aim is to facilitate a transformation in the architectural student's cognitive processes and creative abilities. In this manner, the teaching methods and principles of the Basic Design Course will be developed in accordance with contemporary understanding and approaches, thereby facilitating the advancement of the student's design and creativity competence. The methodology of the study encompasses the theoretical examination of the 'texture' element, a fundamental aspect of design, within the context of the course curriculum. It also evaluates the process of obtaining the final product through the analysis of diverse application methods, as reflected in the application examples developed in the workshop and discussed in terms of their impact on architectural education (Figure 1).

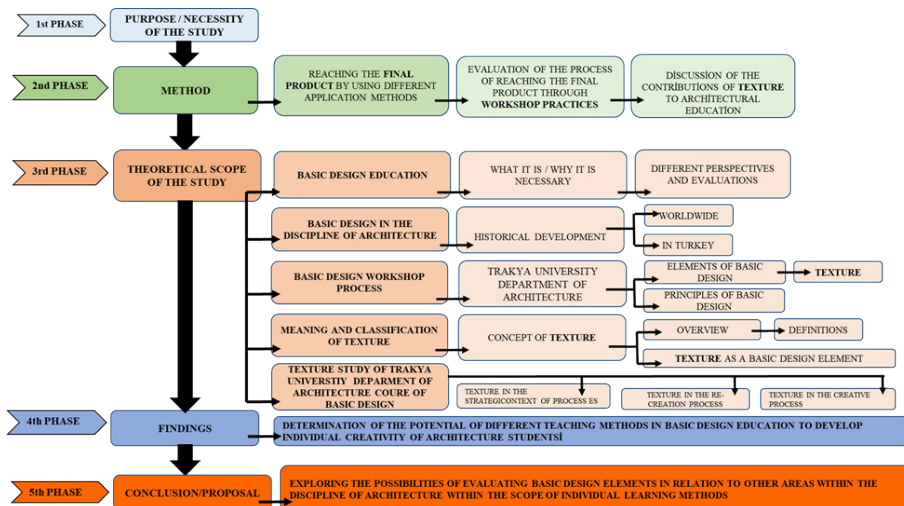


Figure 1. Flowchart of the study. (developed by the authors)

### 3. BASIC DESIGN EDUCATION

The education of the architect has been a subject of debate for centuries. Vitruvius (2021), in his work 'Ten Books on Architecture', highlights the importance of architects receiving multifaceted training [3]. Basic design, which is one of the first year courses with its understanding based on workshops in architectural education. This introductory design course is crucial for fostering the understanding and competencies that architects require for creative problem-solving.

'Basic Design' as an educational program can be developed through students' curiosity and experience rather than the theoretical content of the subject being taught. It is widely accepted that this form of teaching and learning fosters creativity by providing students with a diverse range of shapes, colours, rhythm and unconventional perspectives [4], [5]. Along with these assumptions, 'design workshops' are also evaluated with different approaches.

Arıdağ and Aslan (2012) define today's design studio, similarly to Dewey's (1991) definition of school, as a place that does not give information to students, but accustoms them to find the way of behavior in life and gives them the habit of thinking within this purpose [6, 7]. Hodgkin (1985) states that design education, in addition to the teaching of subjects based on traditional lecturing, focuses specifically on the enhancement of students' creativity and the acquisition of knowledge that is expressed non-verbally as a source of skill-based action, covering all parameters of design knowledge [8]. Ledewitz (1985) summarizes and limits design education to three aspects: learning and practicing a set of new skills such as visualization and representation in the design studio, learning a new language and learning to think architecturally [9], while Yürekli and Yürekli (2004), evaluating design education from a questioning perspective, liken design education, which is intertwined with abstract concepts, to a complex and contradictory structure that is inherently broad, not very clear, difficult to define, understand, classify and formalize [10].

Workshops, where all the affective and intellectual practices related to the act of designing and the language of design are taught, have to keep up with the changes demanded by the times. This need for change and renewal means that design methods and design workshops are constantly being questioned [11]. According to today's understanding, it is not enough for the output of design activities in the workshop to be a good design product, what is important is not only to design, but also to acquire a form of behavior about how to design [12]. At this point, the workshops of the basic design course, which not only ask for what they have given back, but also expect the prospective professional to take the information, turn it over in his mind and shout 'paperwork', stand out among the workshops where architectural education takes place intensively [13].

In the context of architectural design education, the legacy of Bauhaus is evident in the approach to design in the atelier, where the elements and principles of 'Basic Design' are more clearly defined through an evaluation and interpretation of these concepts in the present era. This analysis reveals that a contemporary basic design course should encompass three fundamental understandings. These can be defined as developing students' design skills, identifying and solving design problems creatively, raising awareness of how things around them work, and increasing their ability to communicate [14,15].

#### 3.1. Basic Design in the Discipline of Architecture

Buchanan (2001), who divides design education into four stages, identifies the first stage as apprenticeship. In this phase, where formal education did not exist [16], the master-apprentice relationship was prominent in art schools and academies rooted in the École des Beaux-Arts (18th century / Paris). This relationship involved the apprentice observing and assisting the master during practical work, defining a process through which architects were trained as craftsmen [17, 18].

The beginning of architectural education at the *École des Beaux-Arts* is based on the educational system of the *Académie Royale d'Architecture*, founded in 1671. At the Royal Academy of Architecture, in addition to craft training that preserved the master-apprentice relationship, design studies continued within the studio of an academic (the master) [18,19]. Founded in France by Louis XIV in 1671 as the *Académie Royale d'Architecture*, the Royal Academy of Architecture introduced a two-dimensional composition approach, which formed the first theoretical framework for composition education and provided Classical and Neo-Classical training [20]. It gained official status under the name *École des Beaux-Arts* in 1819, with its influence lasting until 1968 [21]. In the *Beaux-Arts* School, the fundamental principles of design composition were only given within the context of the sub-headings 'space, color and design theory' within the formal educational process.

Another school whose influence can still be observed in architecture programs is the Bauhaus approach [22]. Founded in 1918, the 'Weimar Bauhaus School' was the first art education institution to implement a foundational program focused on teaching creativity, forming the basis of today's basic design education [20]. Unlike the academy's two-dimensional composition approach, Bauhaus' concept of composition emphasized the teaching of three-dimensional perception [23]. The principal distinction between the Bauhaus and the *Beaux Arts* Schools is that the Bauhaus liberates the student from the constraints of tradition, thereby facilitating the exploration of creativity, imagination, and the full spectrum of individual expression [20].

In the understanding of art and design education within architecture and related disciplines from 1870 to 1950, the influence of Bauhaus is quite pronounced [4, 24]. Basic design education is considered a primary outcome shaped by Bauhaus and, from the 1920s onward, by modern architectural thought [25]. and it holds a significant place in first-year architectural education due to its workshop-based pedagogical approach. The Bauhaus educational approach, which originated in Germany and subsequently spread to numerous countries and continents, including the United States, England, France, Italy, and Japan, was first introduced in Turkey in 1956 at METU under the name 'Basic Design' and in 1963 at ITU under the name 'Basic Course.' Since 1982, this educational approach has been implemented as the 'Basic Design' curriculum across all architecture faculties in Turkey.

### **3.2. Basic Design Studio Workflow**

In the first-year architecture curriculum at Trakya University's Faculty of Architecture, the basic design course spans four hours per week during both the fall and spring semesters, comprising theoretical lectures and practical exercises. Although its foundations are in the Bauhaus design approach, the course has been updated in parallel with changes to the educational system from the academic period to the present day [26], reaching its current form in alignment with the structure of the unique Bologna process.

In the fall semester, the course theory is further enhanced with the inclusion of visuals, as illustrated in Figure 2, Phase 1. The basic design elements (line, direction, interval, form, scale, color, value, texture, light-shadow, movement, and fundamental composition) are introduced and discussed through a question-and-answer format, thus allowing students to process the presented knowledge cognitively. The practical component of the course (Figure 2, Phase 2) is designed to incorporate a variety of teaching methods that are aligned with different learning styles. This supports students in making transitions from the abstract/concrete, subject/object, and concept/sketch phases. This structure allows for the accommodation of individual differences in the products and exercises produced.

Upon completion of this creative process, in which learning experiences are optimally organized, structured, and guided, students come to recognize that their direct experiences and experiments have

transformed into a form of creative expression. They experience the concepts of ‘self-expression’ and ‘self-actualization’ being fulfilled [27]. The primary goal is to create a studio environment in which individuals can explore their own learning paths, in addition to experimenting with creative processes within the field of architecture. The transformation of individual or group projects into final outcomes within a discussion-based environment supports the creative processes of architecture students. In this way, the practical studio becomes a space in which theoretical knowledge is translated into abstract, concept-based design objects. Basic design elements are essential for establishing compositional structures and allowing students to express themselves through their designs. Studio exercises are repeated for each basic design element using different methods, thereby fostering students' creative processes through multiple perspectives. This study provides a general evaluation of unique productions that focus specifically on the element of ‘texture’, examining various application methods and their results for the potential they carry.

### 3.3. Texture As A Narrative Tool: Its Meaning And Types

As a concept, texture has the same origin as the word 'text'. The Latin word 'textus' means weave, texture. According to Vasseleu (2005), texture is ‘*the arrangement or characteristic of something woven into a fabric*’ [28]. While the word texture was initially accepted as a textile term referring to the quality of fabric as judged by the sense of touch, the concept was later evaluated in a broader range of philosophical and cognitive terms. Perceptual scientists consider texture to be a visual 'entity' [29].

The term texture is defined as the visual and tactile qualities of surfaces. In addition to encompassing both natural and cultural phenomena, texture also pertains to a significant portion of human experience. In all forms of visual art, craft, design, and architecture, texture serves as an element of scientific aesthetics. In addition to its role in the visual arts, texture has a variety of meanings in other disciplines, including music, language, and even gastronomy [30]. Therefore, examining texture from a visual standpoint offers a constrained view; when viewed in a more comprehensive manner, texture encompasses the multifaceted aspects of the ‘whole’. As an element of basic design, texture is divided into two modes of perception: the tactile, which is inherent to natural forms, and the visual, which is a construct of artificial or perceived textures. The initial category, that of physical or natural texture, is objective and concrete, whereas the latter category, that of visual texture, is subjective and abstract. Additionally, textures resulting from hand knitting and fabric weaving are included in the category of natural textures. In addition to these, there are textures that are classified as ‘artificial.’ For instance, when painting an object, the degree of roughness of its surface is indicated using scans and punctuation. This painted texture on paper is therefore an example of an artificial texture [31].

The texture of a surface or object is determined by its geometric configuration and physical-chemical properties. Even in the absence of visual or tactile perception, textures are described with adjectives such as soft, hard, smooth, rough, spiky, and irregular [32, 33]. The experiences of individuals with a product or material used in a product are complex and multifaceted [34, 35].

Perceived texture represents a synthesis of physiological and psychological responses to the characteristics of a surface or material. In certain circumstances, such as visual perception, the responses to geometric properties may prevail over the physical-chemical properties of texture, or vice versa, as in blindfolded tactile exploration. The relationship between objective texture qualities, typically represented by physical parameters, and subjective texture perception provides a framework for a more comprehensive understanding of textures.

In particular, within the context of art-related disciplines, assessments conducted through both seeing and touching represent essential elements for acts of exploration and creativity. This underscores the

significance of texture as a key factor in such endeavors [36]. The creation of texture also has the effect of influencing innovative practices, as it encourages rational consideration of the application [37].

#### 4. TEXTURE AS A BASIC DESIGN ELEMENT: STUDIO STUDIES

In architecture, basic design studios often approach texture in theoretical lectures through physical/natural/concrete and visual/artificial/abstract perspectives. The ‘texture’ element in the Basic Design I course is addressed within the fundamental classifications discussed in the study, covering the sources of texture effects, texture characteristics, and their psychological impacts.

The course's practical component, outlined in the phases presented in Figure 2, offers students diverse experiences through both abstract and concrete processes. The second phase, which constitutes the core of this study, involved an investigation of diverse application methods over a decade of teaching practice. This phase serves as a foundation for comparison between different approaches to teaching texture (Figure 2).

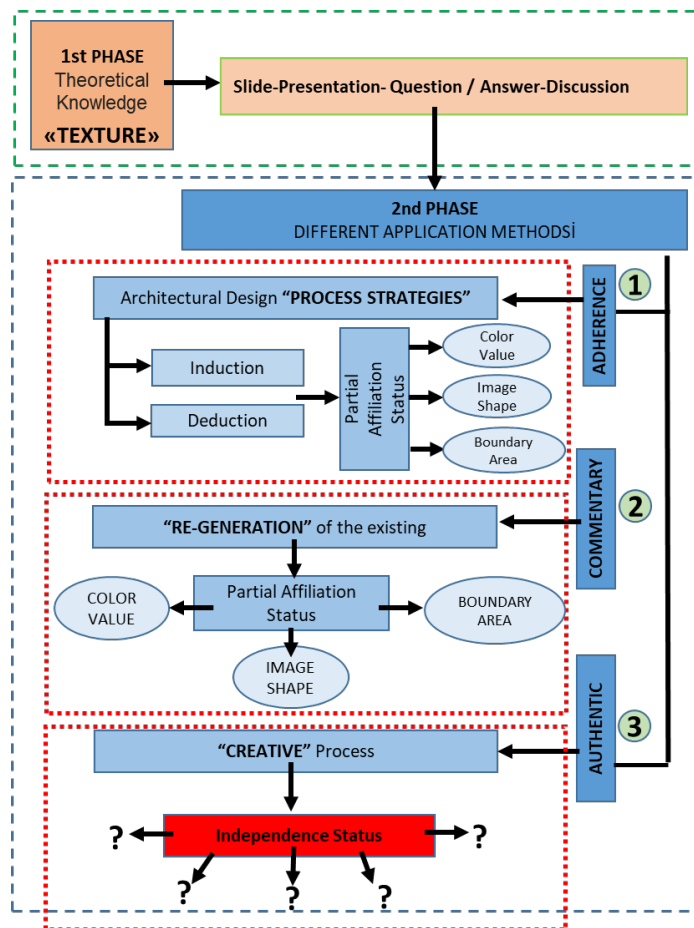


Figure 2. Application workflow for the texture study in the basic design course (developed by the authors)

#### 4.1. Texture in the Context of Design Process Strategies

The architectural design process, which encompasses a multitude of analytical actions, is a complex and problem-solving journey. In this context, knowledge may be conveyed through either ‘deductive’ or ‘inductive’ strategies. The former progresses from the whole to the part, while the latter advances from the part to the whole. This entails transitioning from concepts to concepts or from laws to laws [38]. In the

context of architectural design, the direction of development—whether from part to whole or whole to part—serves as the foundation for what is known as ‘design process strategies’ [39].



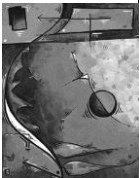

Experiential learning depends on the individual's relationship to the experience in question. Learning can be either deductive or inductive. According to Prince and Felder (2006), deductive learning is a more traditional method, beginning with theoretical principles and then moving from general to specific [40]. Conversely, inductive learning involves a process of observation, experience, and case study analysis, which then informs theoretical understanding.

For this reason, the practical phase of the study is designed to encourage creativity while also conveying and allowing first-year architecture students to experience the fundamental strategies of the discipline. It employs both deductive and inductive methodologies, thereby introducing these core approaches.

#### 4.1.1. Texture from whole to part: Deduction

Within the framework of architectural design process strategies, the ‘deductive’ approach in texture creation involves moving from whole to part, seeking solutions by breaking down the whole into its constituent parts and examining them through the lens of ‘texture’. The study was conducted as two separate applications, each with forty students per group, with restrictions on color and value. In the workshop, the base visuals chosen for the work were intentionally abstract to avoid familiar or easily recognizable images that might unconsciously constrain the students' creativity (Table 1).

Table 1. 'Deductive Texture' studies from Whole to Part (source: authors)

	Original		Student Work / Deduction		Results	
Study Base (the original visual)	 [41]	In the first phase of the study, the selected visual was divided into 40 equal parts, corresponding to the number of students in the workshop. This segmentation established the fundamental units of the study, with each student working on one segment.	<b>Color:</b> Each student, unaware of the overall form, organized their individual segment using texture.		In the study, as a limitation, the abstract visual's traces and colors were preserved, resulting in a final product that retained the dominance of the overall form.	In this study, students adhered to the color and traces of the holistic piece, but they were able to freely evaluate their individual preferences in the use of texture in their work independently of each other.
Study Base (Achromatic conversion)		The abstract visual was studied with another group of 40 students with the constraint of 'value' using a black and white colorless background.	<b>Value:</b> The abstract visual was studied with another group of 40 students with the constraint of 'value' using a black and white colorless background.		In this study, students organized their own parts using texture without being aware of the whole. However, in addition to other constraints, this group completed the texture study by using the values of the color blue with a black and white colorless background.	In this study, students adhered to the traces of the universal part, but they were able to freely evaluate their individual preferences in the use of texture in their work independently of each other.

In both study groups, the ‘whole,’ created by combining the final products on the board, was discussed and evaluated with the students in terms of the original form of the image and the reproduction. Therefore, the final product was determined intuitively with a general judgment, individual judgments were tested

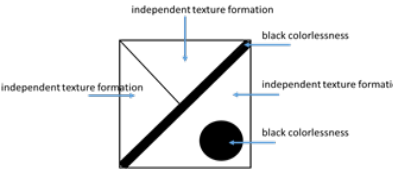



according to the main idea of the previous holistic formation, and it was also possible to recreate the holistic form using 'texture' without damaging its integrity. While the study has deductive limitations in terms of clear boundaries in the whole, it is significant in that each piece was designed by different students with individual preferences regarding texture.

**4.1.2. Texture from Part to Whole: Induction**

In the context of architectural design, induction is associated with the establishment of a unifying framework [38]. This process entails a transition from the examination of individual components to the integration of the entire structure, encompassing the synthesis of smaller units into larger, more comprehensive ones. The process of induction involves the gradual addition, combination, or articulation of parts that will form the design whole. This approach essentially builds up the composition through a process of trial and error, allowing the designer to achieve the desired overall structure. This approach, defined as a method of reaching a universal idea from singular data, was structured scientifically by Bacon [39]. It is a foundational teaching and learning method in all scientific fields where design activity is central [40].

In establishing the part-whole relationship, there is a need for unit modules, modulation-based parts or formations that can complement each other (such as the relationship between indentation and recess, reference lines-areas, etc.). In the effort to achieve the whole, the final product is a surprise. The whole that is formed by the parts that are combined and brought together cannot be clearly predicted. It may even offer many alternatives for coming together. In this study, the basic geometric form of a square (25x25) was chosen as the unit module because of its ease of assembly and the variety of combinations. Using the diagonal of the square as the main reference point, the surface is divided into triangular areas of different sizes. In the large triangular area, a circle shape was placed as a secondary reference point and all reference points were textured with black colorless. In the other triangular areas, the choice of texture type, color, and value was left to the student's interpretation, and each student did his or her own original work (Table 2).

Table 2. Unit module constructed for inductive work and 'Inductive Texture' application example from part to whole. (source: authors)

Study Base	Application	Student Work / Induction
 <p>Unit module designed for inductive study In this study, the basic geometric form of a square (25x25cm) was chosen as the unit module due to its ease of assembly and variety of combinations. With the diagonal of the square as the main reference point, the surface was divided into triangular areas of different sizes. Inside the large triangular area, a circle form was placed as the second reference point and all reference points were textured with black colorless.</p>	 <p>The choice of texturing type, color and value in triangular areas is left to student interpretation.</p>  <p>In this context, each student realized their own original work</p>	 <p>Upon completion of the workshop, the individual works of the 32 students were assembled on the exhibition board with reference to the diagonals, resulting in the formation of a pattern.</p>

During this experience, students were provided with theoretical information about the inductive strategy. Furthermore, the teaching of the process strategy was reinforced with 'supervision-based learning'.



#### 4.2. Re-Creation: Texture in the Footsteps of Famous Painters

The concept of texture is recognized as a component of any image in the human mind. The image in the mind is constituted by life experiences and knowledge. In this context, the accumulated life experience, knowledge, and imagination of the designer (student) will facilitate mutual inspiration and facilitate the emergence of creative thinking. The ‘In the Footsteps of Famous Painters/Texture’ application is based on the concept of reproducing an existing painting by interpreting it in the mind through the lens of texture (Figure 3). The act of reproducing an existing work is a subjective process, shaped by the individual's unique perspective and knowledge base. Each iteration represents a novel interpretation and a distinct production of the artist's work. By its very nature, this process requires partial adherence to the boundaries of space, color or value structure and the general image and shape narrative of the painting. It is crucial to maintain the perceived overall image of the painting.



Figure 3. Re-Creation and Production 'In the Footsteps of Famous Painters / Texture' (source: authors)

In order to gain insight into the direct relationship between the discipline of architecture and the branches of art, as well as to demonstrate the partial commonalities in the foundations of aesthetic teaching across all art disciplines, students were tasked with examining the paintings of renowned painters and selecting a painting that aligns with their aesthetic preferences and inclinations. The objective was to facilitate the growth of general cultural awareness among first-year architecture students by exploring the domain of painting, a significant artistic discipline, and its prominent practitioners. The students conducted research on the painter they selected, the period in which the painter worked, the artistic movement associated with the painter, the title of the painting, and the fundamental concept that the painter sought to convey through the creation of the painting. They then created their own versions of the paintings, incorporating a variety of physical textures in the process. The ‘In the Footsteps of Famous Painters/Texture’ posters, which were presented as final products, were created through a process of reinterpretation and production. This process included the reproduction of the original painting, accompanied by the relevant imprint information, as well as the inclusion of the painter and the movement to which they belonged. In these texture studies, it was determined that the students generally preferred the paintings of famous painters working in a variety of contemporary art movements, including Expressionism, Cubism, Surrealism, Impressionism, and Neo-Plasticism, as well as Japonism. The most preferred painters were Vincent van Gogh, Pablo Picasso, and Edvard Munch. Out of the hundreds of works created within the scope of the course (from 2015 to the present), 24 were selected as exemplars (Table 3). Table 3 which features different artistic movements and painters, highlighted different interpretations and productions of the same painting, emphasizing the role of texture as a means of personal expression and subjectivity. This approach allowed students to make unique

textural choices within the constraints of specific areas and colors of the original artwork. Many students created textures by manipulating paper-through folding, bending, crumpling, etc.-while others used materials that inherently offered different textures, such as shiny, matte, hard, or soft qualities, and smaller objects that could be used as modular units to fill the surface. The project, titled 'In the Footsteps of Famous Painters,' was first implemented in the fall 2014-2015 semester as part of the Basic Design I course and was later exhibited at BRAU 3 (Biennale of Architectural and Urban Restoration, October 2015), where it received national and international attention (Figure 3). The project continued to be part of the curriculum during the pandemic remote learning period (fall semester 2021-2022) and was resumed in person in the fall semester 2022-2023, maintaining the same content and focus.

Table 3. 'In the Footsteps of Famous Painters/Texture' studies

Painter Movement	Original Paint	Reproduction 1	Reproduction 2	Reproduction 3	Reproduction 4	Reproduction 5
Rene MAGRITTE Surrealism Travel Souvenir [42].						
Pablo PICASSO Cubism Blue Guitar [43].						
Pablo PICASSO Cubism Musical Instruments [44].						
Pablo PICASSO Cubism Woman with flowers [45].						
Vincent Van GOGH Impressionism Starry night [46].						
Vincent Van GOGH Impressionism Sunflowers [47].						
Vincent Van GOGH Japonism Almond tree [48].						
Edward MUNCH Expressionism Scream [49].						
Tom FEDRO Cubism Illustrate [50].						
Frida KAHLO Kahloism Auto porter [51].						
Salvador DALI Surrealism Three sphinxes [52].						
Piet MONDRIAN Neo-plastsism Composition [53].						




### 4.3. Texture in the Creative Process

When considered as a surface effect responding to the search for innovation in design, texture can also serve as a starting point for technical solutions. A texture can be transformed from a two-dimensional drawing on paper into a three-dimensional material surface or even a part of the structure itself. In these cases, an innovative approach offers students/designers opportunities to create different surfaces.

In the workshop's 'texture in the creative process' exploration, students were first asked to redefine the outer surface of a balloon using string and adhesive to create a different texture. The surface covered with rope

and glue dried and hardened to form a shell on the surface of the balloon, the air of the balloon was deflated and the transformation of the surface texture into a shell with a pattern, in a sense into a structure and the volume covered by the structure was observed (Table 4). In this way, it was realized that structures, surfaces and textures that did not exist before could be designed, and that the texture could be part of the design or, from another point of view, the design itself.

Table 4. Examples of structure formation (surface-texture-shell) and designs redefined with concave/convex textures in the creative process, titled 'Texture in Original Experience' (source: authors).

Phase 1 - Getting Started Obtaining structure	Progress -2. Phase Texture production	Result -3. Phase Surface-texture-shell
 <p>The surface covered with rope and adhesive dried and hardened to form a shell on the surface of the balloon, the balloon was deflated and the transformation of the surface texture into a shell with a pattern, in a sense, into a structure and the volume covered by the structure was observed.</p>	 <p>In the second stage, the paraboloid and hyperboloid surfaces, which the student obtained by disassembling and reassembling in line with his/her individual preferences, were transformed into an original design composition with texture production.</p>	 <p>In the third and final stage, the surface of the resulting design was redefined with recesses, protrusions and deep textures, and the students reached the final version of their work.</p>

## 5. CONCLUSION

In order to comprehend and define the concept of texture, it is crucial to take into account the parameters that define its physical and chemical properties, as well as the sensory characteristics that emerge from human responses to it, perceived through the senses. Texture can be produced or learned from nature, the mind, and innovations in science and technology.

This article examines the concept of texture in relation to architectural education, with a particular focus on creativity, attention, and awareness. The objective is to encourage independent decision-making through the strategic use of texture, to facilitate the experience of inductive and deductive approaches to design, and to cultivate awareness throughout the design process. In accordance with the outlined framework, the following outcomes have been achieved in the context of texture-focused workshop studies.

- Texture, as a means of expression for surfaces, has been shown to be assessable within the architectural design process strategies. Furthermore, it can serve as a tool for artistic production, transitioning from mere surface expression to embodying spatial design through structural formations and volume.
- It has been demonstrated that while general boundaries may partially restrict creativity, they do not constrain the production of textures.
- The integration of rational knowledge with designer-dependent creativity and intuition facilitates a continuous feedback process through experiences, allowing designers to adopt a distinctive approach for each new creation (Figure 4).

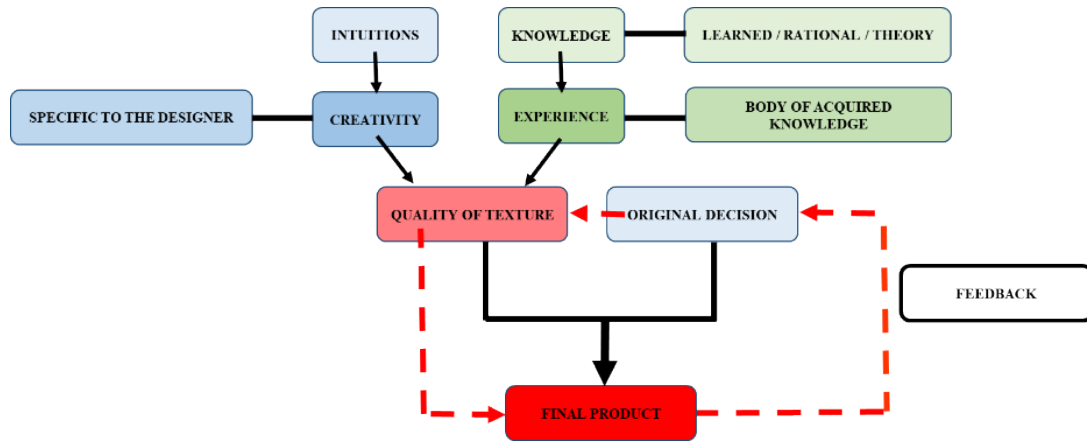


Figure 4. The relationship between texture creation and creativity (developed by the authors).

- The studies titled Inductive and Deductive Texture, Texture in the Footsteps of Famous Painters, and Texture in the Creative Process in the Basic Design I course have specifically supported learning outcomes such as utilizing examples, identifying formal composition systems, and employing design elements within composition structures. Additionally, these exercises have enhanced students' perceptual awareness and imagination, thus improving their creative design skills.
- It has been found that the forms of teaching enriched with different methods in a workshop environment have the potential to develop the individual creativity of architecture students.

Basic design workshops are significant within the discipline of architecture, both in terms of their position within the field and their widespread impact on architectural education. This study, which deals with the element of texture, can serve as an illustrative example for many other studies in terms of its approach to the subject matter.

## REFERENCES

- [1] Dufrenne, M. (1973). Phenomenology of Aesthetic Experience. Evanston: Northwestern University Press.
- [2] Merleau-Ponty, M. (1995). Signs, Evanston: Northwestern University Press.
- [3] Vitruvius, (2021). Mimarlık Üzerine On Kitap, çev. Çiğdem Dürüşken, İstanbul:Alfa.
- [4] Boucharenc, C.G. (2006). Research on Basic Design Education: An International Survey, International Journal of Technology and Design Education, 16:1-30.
- [5] Salama, A. M. (1995). New Trends in Architectural Education: Designing the Design Studio, Tailored Text and Unlimited Potential Publishers. <https://www.archnet.org/publications/4475z>, last accessed on 15 May 2024.
- [6] Arıdağ, L., Aslan, A. E. (2012). Tasarım Çalışmaları-1 Stüdyosunda Uygulanan Yaratıcı Drama Etkinliklerinin Mimarlık Öğrencilerinin Yaratıcı Düşünce Becerilerinin Gelişimine Etkisi, Megaron, 7, 1, s.49-66.
- [7] Dewey, J. (1991). How we think. New York: Prometheus Books.
- [8] Hodgkin, R., A. (1985). Playing and Exploring: Education through the Discovery of Order, Methuen, London, p. 146.
- [9] Ledewitz, S. (1985). Models of Design in Studio Teaching. Journal of Architectural Education (1984), 38(2), 2-8. doi:<https://doi.org/10.2307/1424811>

- [10] **Yürekli, H., Yürekli, F. (2004).** Mimarlık: Bir Entelektüel Enerji Alanı, İstanbul: Yapı Yayın.
- [11] **Onur, D., Zorlu, T. (2017).** Tasarım Stüdyolarında Uygulanan Eğitim Metotları ve Yaratıcılık İlişkisi, The Turkish Online Journal of Design, Art and Communication – TOJDAC, October, Volume 7 Issue 4, pp. 542-555
- [12] **Arıdağ, L. (2005).** Mimari Tasarım Stüdyo Eğitiminde İletişim, Yayınlanmamış Doktora Tezi, İstanbul Teknik Üniversitesi, Fen Bilimleri Enstitüsü, İstanbul: İTÜ
- [13] **Öymen Gür, Ş. (2000).** ‘Mimarlıkta Temel Eğitim Dersi Uygulaması’, Mimarlık Dergisi, sayı 293, Ankara: Mimarlar Odası, pp. 25-34
- [14] **Lang, J. (1998).** Öğrenciler İçin Mimarlığa Giriş: Temel Tasarım Dersini Yeniden Düşünmek, Derleyen: N. Teymur., Aytaç Dural (Eds.), Temel Tasarım/Temel Eğitim Sempozyumu Kitabı, Ankara: ODTÜ Mimarlık Fakültesi.
- [15] **Yıldırım, Ş. (2021).** Mimari Temel Tasarım Eğitiminde Tasarım İlkelerinin Algılanması Üzerine Bir İnceleme, Yayınlanmamış YL Tezi, Alanya Hamdullah Emin Paşa Üniversitesi Lisansüstü Eğitim Enstitüsü: Alanya
- [16] **Buchanan, R. (2001).** Design Research and the New Learning, Design Issues Autumn 2001, Vol. 17, No. 4, 3-23.
- [17] **Ciravoğlu, A. (2003).** Mimari Tasarım Eğitiminde Formel ve Enformel Çalışmalar Üzerine, Yapı 257, [https://www.yapi.com.tr/haberler/mimari-tasarim-egitiminde-formel-ve-enformel-calismalar-uzerine\\_61061.html](https://www.yapi.com.tr/haberler/mimari-tasarim-egitiminde-formel-ve-enformel-calismalar-uzerine_61061.html), last accessed on 15 January 2024.
- [18] **Uluoğlu, B. (1990).** Mimari Tasarım Eğitimi:Tasarım Bilgisi Bağlamında Stüdyo Eleştirileri, Yayınlanmamış Doktora Tezi, İTÜ Fen Bilimleri Enstitüsü, İstanbul: İTÜ.
- [19] **Schön, D.A. (1985).** The Design Studio: An Exploration of Its Traditions and Potentials. RIBA Publications.
- [20] **Balamir, A. K. (1985).** Mimarlık söyleminin değişimi ve eğitim programları. Mimarlık, 85(8), 9-15.
- [21] **Drexler, A., Chafee, R., Levine, N., Zanten, D.V., (1977).** The Architecture of the Ecole Des Beaux-Arts. New York: Museum of Modern Art Publications.
- [22] **Gropius, W. (1965).** The new architecture and the Bauhaus (Vol. 21). MIT press.
- [23] **Pasin, B. (2007).** Mimarlık okullarındaki temel tasarım eğitiminde müzikal kompozisyonun kullanımı üzerine bir alan çalışması, Yayınlanmamış Yüksek Lisans Tezi Dokuz Eylül Üniversitesi, İzmir
- [24] **Artun, A., Aliçavuşoğlu, E. (2009).** Bauhaus: modernleşmenin tasarımı. İstanbul: İletişim Yayınları.
- [25] **Akış, T. (2009).** Türkiye Mimarlık Akademisinde Mekan Algısı ve Bilimselleşme: 1970'lere Yeniden Bakış. Dosya 17: Mimarlık ve Mekan Algısı, Mimarlar Ankara Odası Şubesi, Ankara, 17-23.
- [26] **Akansel, S., Varlı, E. (2022).** Trakya Araştırmaları Trakya Üniversitesi'nin 40. Kuruluş Yılı Dönümü Armağan Kitabı, [Eds]: E. Benian & T.Canitez, Edirne: Trakya Üniversitesi.
- [27] **San, İ. (2003).** Sanat Eğitimi Kuramları, Gözden geçirilmiş 2. Baskı, Ankara: Ütopya, p: 25
- [28] **Vasseleu, C. (2005).** Textures of light: Vision and touch in Irigaray, Levinas and Merleau-Ponty. New York: Routledge.
- [29] **Nalini B., Ravishankar R., A. (1997).** The Texture Lexicon: Understanding the Categorization of Visual Texture Terms and Their Relationship to Texture Images, Cognitive Science, Vol.21, No.2, pp.219-246.
- [30] **Oei, L. (2002).** The Elements of Design / Rediscovering Colours, Textures, Forms and Shapes, Thames & Hudson Ltd: New York.
- [31] **Güngör, İ., H. (2005).** Görsel Sanatlar ve Mimarlık İçin Temel Tasarım -Basic Design, Bilgisayar Destekli Baskı ve Reklam Hizmetleri Sanayi ve Ticaret LTD.ŞTİ., İstanbul.
- [32] **Opstad, K. D. (1990).** Teksturer i vev [Textures in tissues], Master thesis in Design, Arts and Craft. Statens lærerhøgskole i forming Oslo, Norway.
- [33] **Opstad, K. D. (2011).** Tekstur – et estetisk virkemiddel [Texture – an aesthetic tool], Paper presented at the conference FoU i praksis, 26-27 April 2011, Trondheim, Norway.

- [34] Desmet, P., Hekkert, P. (2007). Framework of Product Experience, *International Journal of Design*, 1(1) 57-66.
- [35] Zuo, H. (2010). The selection of materials to match human sensory Adaptation and aesthetic expectation in industrial design Hengfeng, *METU JFA 2010/2 (27; 2)*, 301-319, doi:10.4305.
- [36] Opstad, K. D., Alerby, E. (2017). Textur, tystnad och kroppslighet. [Texture, silence and embodiment]. Paper presented at the e17 conference: ‘Tacit knowing or just plain silence?’, 31 October–2 November 2017, Umeå, Sweden.
- [37] Zuo, H., Jones, M. (2024). Exploration into Formal Aesthetics in Design: (Material) Texture (online). [https://www.researchgate.net/profile/Hengfeng-Zuo/publication/265872626\\_Exploration\\_into\\_formal\\_aesthetics\\_in\\_design\\_material\\_texture/links/54acf090cf2479c2ee86563/Exploration-into-formal-aesthetics-in-design-material-texture.pdf](https://www.researchgate.net/profile/Hengfeng-Zuo/publication/265872626_Exploration_into_formal_aesthetics_in_design_material_texture/links/54acf090cf2479c2ee86563/Exploration-into-formal-aesthetics-in-design-material-texture.pdf), last accessed on 15 May 2024.
- [38] Bayazıt, N. (1994). Endüstri Ürünlerinde ve Mimarlıkta Tasarlama Metodlarına Giriş, İstanbul: Literatür.
- [39] Ünügür S.M. (1989). Bina Tasarımının Temel İlkeleri, İstanbul: İTÜ Mimarlık Fakültesi.
- [40] Prince, M. J., Felder, R. M. (2006). Inductive Teaching and Learning Methods: Definitions, Comparisons and Research Bases. *Journal of Engineering Education*, 95(2), 123-138.
- [41] URL-1 <https://megan-duncanson.pixels.com/featured/abstract-pop-art-original-painting-megan-duncanson.html>, last accessed on 15 June 2024.
- [42] URL-2 <https://www.arthipo.com/tr-tr/rene-magritte-seyahat-hatira-esyasi.html>, last accessed on 13 July 2024.
- [43] URL-3 <https://tr.pinterest.com/pin/402790760415667231/>, last accessed on 13 July 2024.
- [44] URL-4 <https://www.artistisu.com.au/paint-by-numbers-kits/by-size/50cmx65cm-popular/musical-instruments-by-picasso-paint-by-numbers-50x65cm-kit/>, last accessed on 13 July 2024.
- [45] URL-5 <https://www.istanbulsanatevi.com/sanaticilar/soyadi-p/picasso-pablo/pablo-picasso-cicekli-kadin-9523/>, last accessed on 13 July 2024.
- [46] URL-6 <https://www.istanbulsanatevi.com/sanaticilar/soyadi-g/gogh-vincent-willem-van/vincent-willem-van-gogh-yildizli-gece-364/>, last accessed on 13 July 2024.
- [47] URL-7 <https://www.pivada.com/vincent-van-gogh-aycicekleri>, last accessed on 13 July 2024.
- [48] URL-8 <https://artucky.com/blogs/blog/vincent-van-gogh-almond-blossom-cicek-acan-badem-agaci-hikayesi>, last accessed on 13 July 2024.
- [49] URL-9 <https://www.pivada.com/edvard-munch-ciglik>, last accessed on 13 July 2024.
- [50] URL-10 <https://pixels.com/featured/illustrate-tom-fedro-fidostudio.html>, last accessed on 13 July 2024.
- [51] URL-11 [https://tr.wikipedia.org/wiki/Dosya:Frida\\_Kahlo\\_%28self\\_portrait%29.jpg](https://tr.wikipedia.org/wiki/Dosya:Frida_Kahlo_%28self_portrait%29.jpg), last accessed on 13 July 2024.
- [52] URL-12 <https://www.dalipaintings.com/three-sphinxes-of-bikini.jsp>, last accessed on 13 July 2024.
- [53] URL-13 <https://www.istanbulsanatevi.com/sanaticilar/soyadi-m/mondrian-piet/piet-mondrian-mavi-kirmizi-ve-sarili-kompozisyon/>, last accessed on 13 July 2024.

**Pınar KISA OVALI**, Assoc.Prof. Dr.,

Pınar KISA OVALI graduated from Trakya University Faculty of Engineering and Architecture in 1994 as an architect. She continues her academic career, which she started in 1995, as an Associate Professor in the Department of Architecture at Trakya University Faculty of Architecture. She teaches basic design, architectural projects and sustainability related courses at undergraduate and graduate levels. She has many national and international articles, book chapters and proceedings on sustainable architecture, vernacular architecture, ecological design, ecological tourism and basic design education.

**Bilge ATAÇ ÖZSOY**, Lecturer Dr.,

Bilge ATAÇ ÖZSOY works as a lecturer at the Department of Architecture at Trakya University, Faculty of Architecture. She teaches undergraduate courses on Basic Design, Architectural Projects, and courses that question the relationships between architecture and cinema, and architecture and literature. She graduated from Yıldız Technical University, Faculty of Architecture as an architect and received her PhD in architecture from Trakya University.