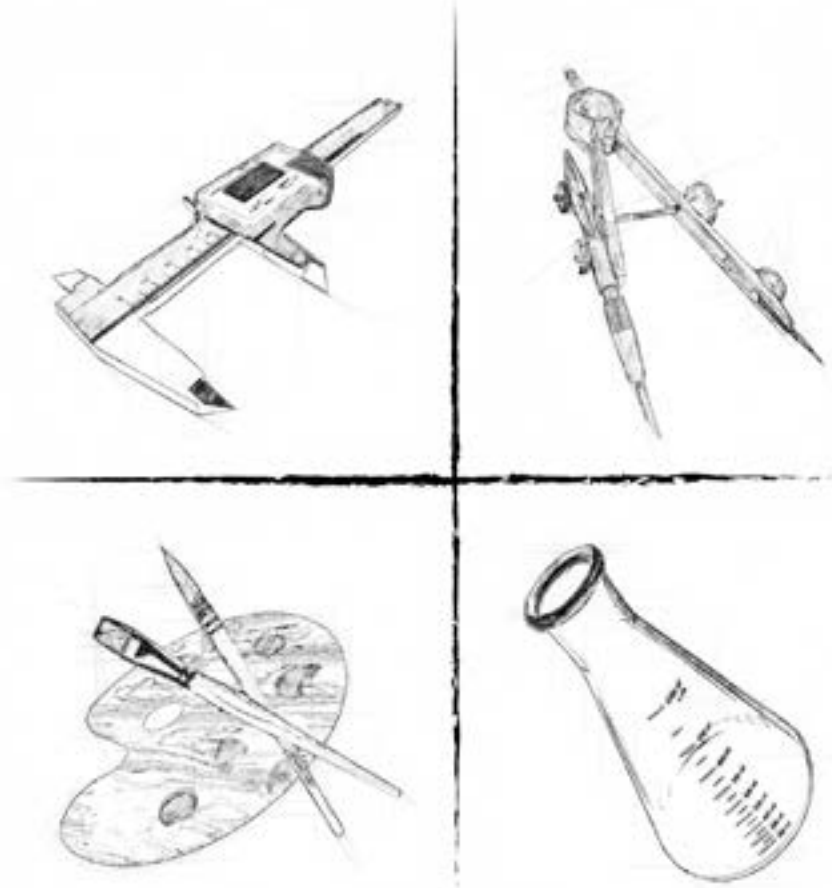

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EDITORIAL

Joining tens of thousands of scientific publications with a new journal, the fourth journal of our university, is a happiness source. With the innovative approach to content creation, the Journal of Sketchle, whose second issue has been published, will be noticeable worldwide. This journal will contribute to the transmission of scientific thought into the world in which each individual interacts with the mass media and environments such as television, magazines, newspapers, internet publications, platforms through visual and written representations. This journal, which put forward visual thinking to produce the new and different one, will enable the scientific studies to be handled and presented with a different perspective in the field. Today, understanding, interpreting, and producing visual data in the world is considered one of the conditions for effective communication. With this awareness, different disciplines in general and the design discipline, in particular, reveal the contributions of visual thinking to creativity and creative problem solving with further studies. The Journal of Sketchle expects to be considered as an opportunity environment in which like these studies takes place for academicians. The act of drawing is regarded as a thinking tool-environment in many areas, including the design field. This new journal invites academicians, teachers, and students to think through drawings for their work. Here sketch, one of the essential visual thinking tools, is seen valuable for all fields dealing with creative problem-solving. In this direction, the journal's name was created by combining the concepts of "Sketch" and "Article". In the journal, which aims to produce new ones and convey existing visual information, visuality has been evaluated as a driving force for production, not as a consumption tool as it is today. With this second issue, the journal reflects the belief that visual thinking is an effective learning and teaching tool. Journal of Sketchle naturally contains the main principles expected from a scientific journal and publishing. However, besides the forms of expression existing in a scientific publication, it primarily aims to include studies that support visual thinking. The scope of the journal is open to the work of scientists from every field. The range has also been expanded to include student studies to make associate, undergraduate, and graduate students enjoy and adapt to the research discipline and culture. The journal consists of reviews and research articles, and in this context, it makes calls to experts in the field, instructors, and students. I would like to express my gratitude to our university's academic staff, who came up with the first idea in the emergence of the ESTU Journal of Sketchle with its original aspect, developed and prepared it for publication, and the other experts who contributed to this process. I wish you success in publishing life.

Prof. Dr. Tuncay Döğeroğlu
Rector of Eskisehir Technical University

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Sillick, T. J., & Schutte, N. S. (2006). Emotional intelligence and self-esteem mediate between perceived early parental love and adult happiness. *E-Journal of Applied Psychology*, 2(2), 38–48. Retrieved from http://ojs.lib.swin.edu.au/index.php/ejap/article/view/71/100

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Christian, D. L. (2007). *Finding Community: How To Join An Ecovillage Or Intentional Community*. Canada: New Society Publishers.

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Conference proceedings
Chan, C. F. and Lee, K. H. (1986). Organisational culture and salesperson's ethical position. In R. T. Hsieh and S. Scherling (eds.), Proceedings of the Academy of International Business SEA Regional Conference (pp. 3-9). National Chiao Tung University, Tapei.

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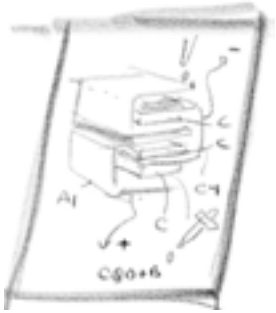

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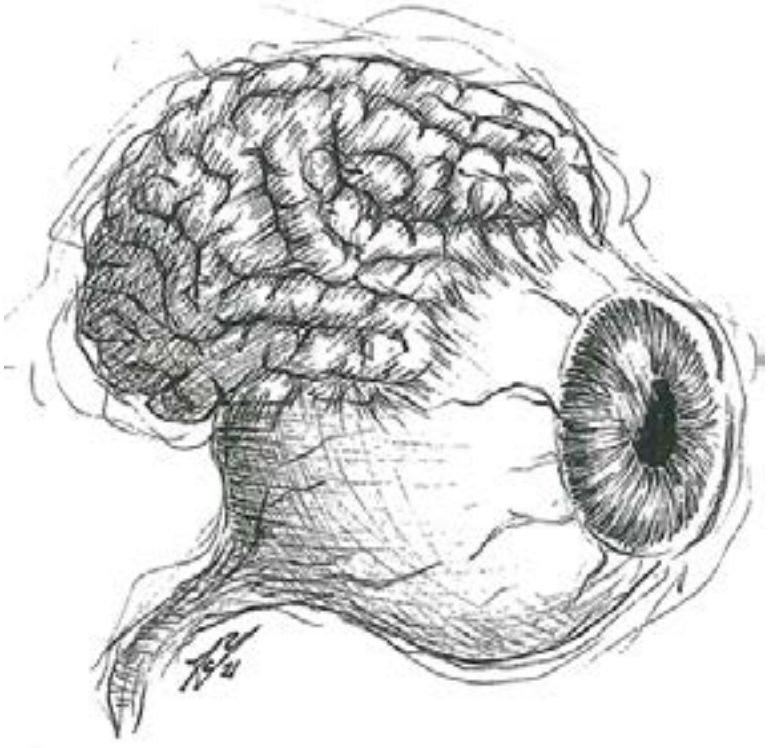
Visual Thinking and Sketching in Design Creativity

Aysu Ceren Yılmaz[a], Özge Kandemir[b]

[a,b] Department of Interior Design, Faculty of Architecture and Design, Eskişehir Technical University, Eskişehir, Turkey

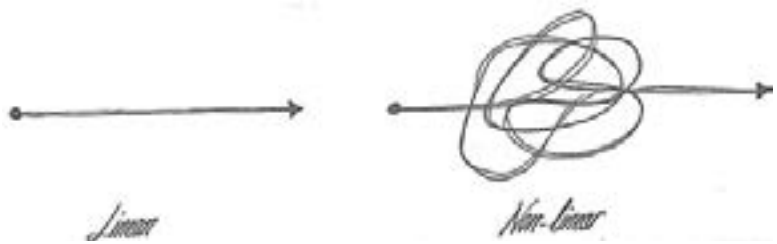
Keywords: Design, Creativity, Visual Thinking, Sketching

Abstract Design is a practice that is highly dependent on creativity. Because design problems are viewed as ill-defined and unique, usual or ordinary solutions may fall short when solving the problem. The designer has to think creatively, bend and shape the process to find new methods to produce the solution. While there are many different ways of thinking, each valuable and effective in certain ways, visual thinking is a particularly beneficial skill for design creativity beyond its apparent advantages in representation and presentation. In design practices, visual thinking is a cognitive process that entails visual processing information and generating new and unique ideas to solve a design problem. Visual thinking has the potential to help see things in new ways, discover new relations and create unique solutions for design problems. In doing so, visual thinking utilizes certain tools, including sketching. Sketching has specific properties that are essential to creative problem-solving in design practices. Because of their abstract, free nature, and flexibility, sketches become a creative medium in solving complex design problems. In this regard, the study aims to reveal the relation between visual thinking and sketching in the context of design.



1. Introduction

Design is a process that requires creativity. But why does it need creativity? Design is a non-linear process, and design problems are ill-defined or "ill-structured" problems, as Goldschmidt (2017) defines. The problem is generally shaped during the process. Since every design problem is unique, they all have unique needs and requirements. Thus, there is no pre-approved solution that can be applied to all design problems. The solution has to be created according to the needs of the problem in the process.



Thus designers aim to generate original solutions specific to the problem, utilizing external inputs and their experience. To compose new solutions and design the unique, the designer must learn to think and see differently, discover new and perhaps unusual relations. By definition, this ability is creative thinking, which can be achieved by utilizing many different means and methods. In this perspective, the study aims to assess and emphasize the role of sketches and visual thinking in creative design practices by reviewing the articles and other media on the subject.

2. Method

This study is a result of the review of information obtained from the international and national articles regarding the subject mentioned above. Furthermore, the visuals used have been specially created for this study.

3. What is Creativity, and Why is it Important in Design Practices?

To understand the role of creativity in design practices, first, we must understand how the design process works. As Goldschmidt states, "Designing exhibits some of the most complex manifestations of human problem solving" (Goldschmidt, 1992). Designing is a complex problem-solving process, and since the design problems are mostly ill-defined, the designers often piece the problem together as they go. The problem evolves with the process. Therefore, the solution is never clear from the start. Instead, it is formed and composed as the problem evolves.

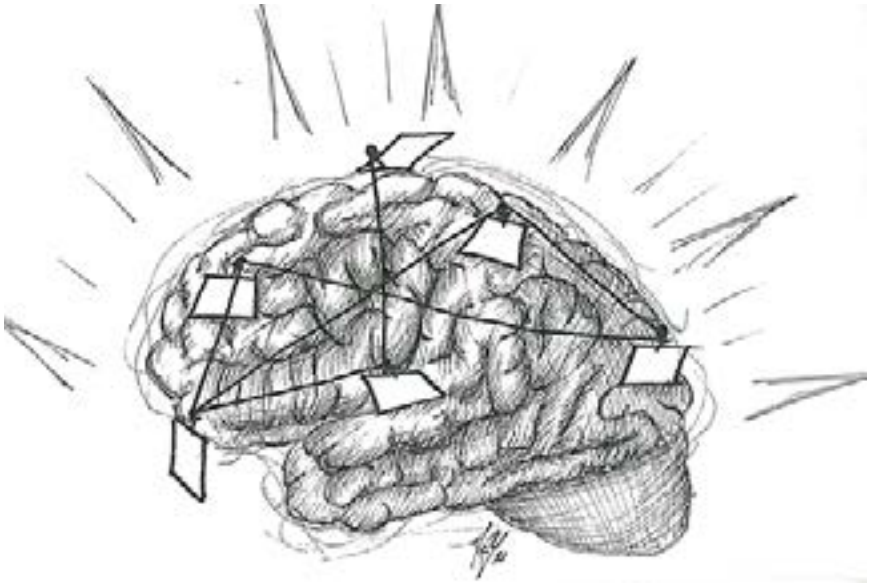
Consequently, the designers cannot use conventional methods or solutions; there is no "one true answer" for design problems. Instead, they must choose the best fit from millions of possible solutions

That is where creativity steps in. To find the best fit, designers play with the information, external inputs, concepts, and images they possess. But to find the unusual in between, they need to think creatively.

But what is creativity? Creativity has many definitions across different practices. We could mainly say that creativity aims to find the new, the unusual, the unique. Bateson and Martin's (2013) definition is "generating novel actions or ideas, particularly by recombining existing actions, ideas or thoughts in new ways or applying them in new situations" Similarly, San defines creativity as "subtracting something brand new out of commonly known things, arriving to a new and original synthesis, finding new solutions to certain problems" (San, 2019) Eagleman (The Creative Brain, 2019) sees creativity as the best feature of humanity and states that it "does not belong to an elite minority, it is what human brain does." This means: creativity is something everyone has to some extent, something that can be learned and improved.

At this point, Andreasen (2019) asked creative individuals to explain their creative process in their own words, aiming to study their commonalities. Andreasen found out that these individuals have experienced similar steps in their process. First, creative individuals research and analyze the subject thoroughly. They get into a state of deep concentration and continuous thinking. The subject completely invades the brain; any relevant information is stored. So much so that even when there's no active thinking on the background, the brain keeps working unconsciously, constantly making associations about the subject (Andreasen, 2019).

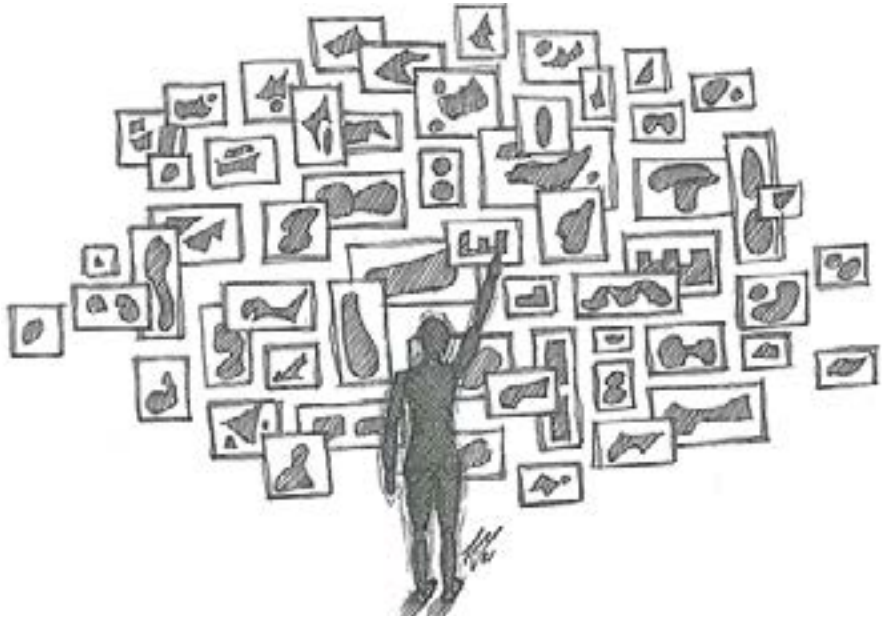
Eagleman emphasizes that our brain is evolved in a way that enables creativity. As he explains in the documentary, the input and output regions are close in other animals' brains, creating an automatic reaction to the input. Since human evolution has pushed these regions apart, there isn't always an instant reaction in the human brain. The input can "mix and collide with what's already there". Also, the human brain's evolution caused the prefrontal cortex to develop, which, according to Eagleman, "gave us our imagination, setting us apart from other animals and making us uniquely creative" ("The Creative Brain," 2019).



This situation allows us to draw, relevant or not, any data from different brain regions to be used in problem-solving. We can pull up existing information and experiences to help make new connections. San says, "Both Einstein and Picasso have thought with the concepts everyone knew and used, but they have created new associations, connections and relations with them" (San, 2019).
So as a practice in which the outcome is inevitably has a material and visual entity, visual elements occupy an important place in the design process. And since communicating a visual concept in words may not be sufficient at times, thinking and representing visually is a beneficial skill to have, especially in the early stages of the process where the majority of the idea generation occurs.

4. Creative Thinking and Visual Thinking in Design Problem Solving
While there are many different ways of thinking -all of which contribute in other ways, each is valuable and effective-, visual thinking is particularly beneficial for design. It is a powerful tool for design creativity. Goldschmidt (1992) argues that visual thinking is fundamental to design since design problem-solving requires visual searching.
Our world tends to favor the measurable, the verifiable. Consequently, some forms of thinking have a slight dominance, like verbal and scientific thinking, usually defined as a logical, mathematical way of thinking. However, this approach may trivialize other forms of thinking, such as visual thinking, which is essential in design practices. As Arnheim stresses:
"We have neglected the gift of comprehending things through our senses. Concept is divorced from percept and thought moves among abstractions. Our eyes have been reduced to instruments with which to identify and to measure; hence we suffer a paucity of ideas that can be expressed in images and an incapacity to discover meaning in what we sec. Naturally, we feel lost in the presence of objects that make sense only to undiluted vision, and we seek refuge in the more familiar medium of words." (Arnheim, 1954)

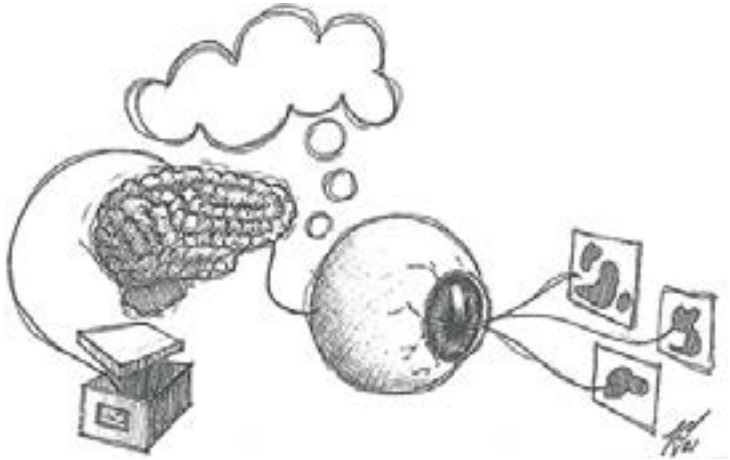
Atalayer and Üstün (2000) state that humans are creatures that can design, visualize and create new images. They emphasize that in any visualization, inevitably, there will be visual elements. While working on something that the outcome is inevitably visual, expressing and testing ideas with something other than visuals may not be as helpful, as Arnheim suggests:
"It often happens that we see and feel certain qualities in a work of art but cannot express them in words. The reason for our failure is not that we use language but that we have not yet succeeded in casting those perceived qualities into suitable categories. Language cannot do the job directly because it is no direct avenue for sensory contact with reality" (Arnheim, 1954)
The design aims to generate and develop ideas, and it relies heavily on visuals. In many design disciplines, the outcome is a material and/or visual entity, and to create such an entity, images, visuals, and models are used in the process.



As Goldschmidt (2017) expresses, "Designers are avid consumers of images." Especially in the early stages of design, images are utilized to get the creative flow started. Visual thinking is a cognitive problem-solving process. Images are part of the visual process in design and have significant functions, such as being sources of inspiration and providing feedback to evaluate and revise the ideas. Arnheim (1980) believes that to solve abstract problems; there's no better setting than perception. According to him, without creating a mental image, thinking towards or visualizing the solution is impossible. In the early stages, the mental image of the solution isn't yet clear. Consciously or unconsciously, the mind associates all available images -however unrelated- to the problem and step by step forms the solution. As Goldschmidt (1992) suggests, in the visual thinking process, the designers draw relevant mental images available with the guidance of their experiences. Whether they are external or mental, images provide information. In the process, this information is processed, adjusted, combined, in mind, and transformed into images that may provide a solution.

A considerable part of visual thinking occurs in the unconscious mind. The act of thinking is usually perceived as conscious and logical. As a result, the kind of selective thinking that occurs in the perception plane isn't considered a valid form of thinking. Therefore, as thinking doesn't solely happen consciously, the unconscious forms of thinking should not be overlooked. Our senses not only provide data for conscious thinking to analyze, but they also have cognitive functions that contribute to thinking. For example, sense of sight has unconscious selective reflexes that work much faster than conscious thinking. Sense of sight reacts to data in accordance with experiences, and the input runs into the existing information on its way to reaction.

When encountered something abstract, its properties like shape, size, color, and their relations are perceived as a whole. However, how it is interpreted depends on the context, the approach, experiences, education, and visual memory of the individual. This happens in a split second, and it occurs without any active thinking. Active thinking is shaped according to perception. The visual thinking process is a combination of these unconscious and conscious elements.



As Horton states, we all are visual thinkers, and visual thinking can be learned and improved. However, he stresses that we must learn to see and observe because what we create is not shaped by what we see but what we pay attention to (Horton, 1992). So while improving visual thinking, visual memory with its quality of the data makes the real difference. Eagleman stresses that however rich and extensive the data is, there's much to play with, much data for percepts to collide with to feed creativity. (The Creative Brain, 2019). At this point, visual thinking considerably benefits from sketches. Their ambiguous nature leaves room for new ideas; makes it possible for the designer to read the new relations.

5. The Role of Sketches in Design Problem Solving

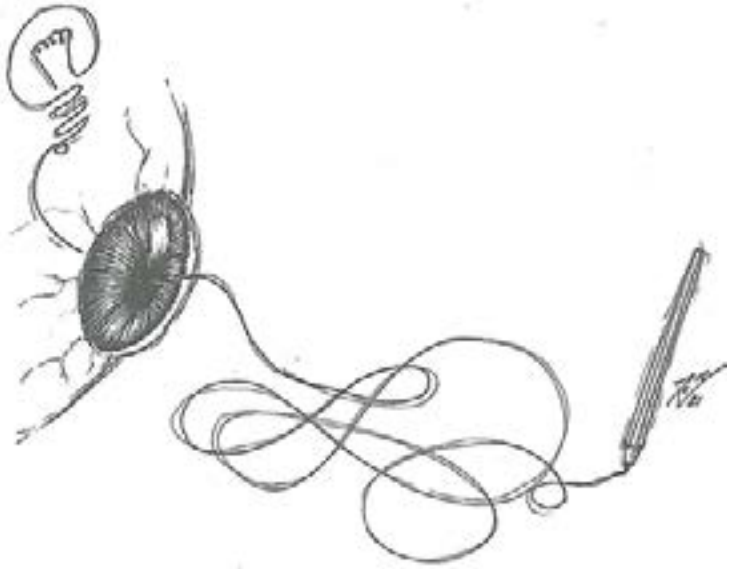
Belardi (2019) sees sketches are extraordinary design tools. Although design problems are shaped and solved by the designer, in the process, sketches become tools for the designer to both create and solve design problems. (Ayıran, 2007) To Tversky (2002) "Sketches are a way of externalizing ideas, of turning internal thoughts public, of making fleeting thoughts more permanent." She stresses that sketches are "a kind of external representation serving as a cognitive tool to augment memory and information processing by relieving the mind of some of those burdens." (Tversky, 2002) Belardi defines them as such: "Sketching is a quick, readily available, dense, self-generative, and, above all, extraordinarily communicative notational system." (Belardi, 2019). He states that a combination of these qualities makes it a precious tool for human creativity.

Designers don't only use sketches to realize mental images but also as a means to create them. Goldschmidt emphasizes that sketches introduce design with unique dialectic (Goldschmidt: 1991). Visual thinking can occur consciously or unconsciously. The part that occurs unconsciously is fast and relies on experiences and visual memory. Images it feeds on must be produced without interrupting the thought process to use this unconscious reflex effectively.

. To ensure this, according to Goldschmidt, the visual generation method must fit certain criteria like speed of production, minimal generation rules, tolerance of ambiguity, inaccuracy and incompletion, transformability and reversibility, flexible stop rules. (Goldschmidt, 2017). She states sketches fit said criteria perfectly. Sketches' ambiguousness benefits creativity. They allow us to draw information from different parts of the brain. They automatically call back existing data and experiences. Sketches provide abstract visual inputs that can be interpreted in countless ways in the task context, or sometimes even random, entirely unrelated concepts. Belardi expresses that sketches are able to combine the artists' creative act and the scientists' invention and eliminate the division in between. (Belardi, 2019).

Design progresses through the fast flow of thought and associations. It is a non-linear, flexible process that mostly has no order. Because of its nature, according to Goldschmidt (2017), it is impossible to use readily available images to express the design thought process. Instead, sketches can be produced rapidly without interrupting the thought process and provide the designer with many ideas to choose from.

While there's information to discover in any visual, and they all may be used in the process, sketching has a distinct advantage. Sketching helps understand mental images by converting them into concrete expressions and, thus, is beneficial in the problem-solving process(Ayıran, 2007). Furthermore, sketches are produced directly in accordance with the design problem. Therefore they provide data that no other external images can offer. To Goldschmidt (2017), on account of this, sketches have a unique role in design. By enabling access to the information they possess, sketches feed the visual thinking process.



Sketches "do not portray reality; rather they convey conceptions of reality."(Tversky, 2002) In the early stages, sketches are fast ambiguous, mostly only meaningful to the designer. Their abstractness allows the imagination to work. They leave room to try out possibilities without committing prematurely.
The sketch is "able to continuously regenerate itself, always offering new suggestions—sometimes ones that prove surprising even to their author." (Belardi, 2019). Goldschmidt (1991) emphasizes that this dynamic nature of sketching is useful in design. Because design requires the ability to backtrack and revise rapidly. With sketches, designers are able to return to any step anytime to revise the work. Twersky conveys that sketching helps "check the completeness and internal consistency of an idea" (Tversky, 2002). Ayıran states that sketches can be seen as "an activity of continuous change in the course of reaching a designer's ultimate goal."
Tversky sees sketches as a means of communication, just like writing and speaking: a self-communication medium. (Tversky, 2002). Sketches and mental images work in communication; they feed and improve one another. Sketching aids the unconscious part of visual thinking by extracting data from memory to associate with the problem. They provide the designers a setting to self-communicate and enable communication between designers and their visual memory and experiences. The sketch, as Goldschmidt (1992). expresses"talks back to the designer."

6. Conclusion

Design is a process that is inevitably creative. To solve complicated design problems, tools with specific qualities are required. Visual thinking and sketching prove to be beneficial at this point. Visual thinking is a selective unconscious process that helps the designer to discover new associations, see in new ways. As visual thinking relies heavily on mental and external images, sketches are great tools to feed visual thinking. As Tversky states, "sketches contain more than they were created to tell; new ideas and forms can be discovered in sketches." (Tversky, 2002) They help externalize mental images, aid the creation of mental images, and since they are produced for a purpose in mind, they provide information that no external image can offer. As established previously, experience makes a difference; experienced designers are able to utilize these skills more productively in their process. Therefore, improving these skills will prove beneficial for design problem-solving. This study was written by reviewing the articles written on the subject to emphasize the importance of these skills and hopefully give visual thinking and sketching some recognition in the world of formulas and numbers.

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“Architectural Sketch Studio” Experience on The Act of Making, Learning and Understanding

Bilgehan Yilmaz Çakmak[a]

[a]Department of Architecture, Faculty of Architecture and Planning, Konya Technical University, Konya, Turkey

Keywords: Architectural Sketch Studio, Alternative Education, Sketching

Abstract Thinking with sketches is the most basic way of thinking in architecture. Thinking, on the other hand, includes understanding comprehension and producing new thoughts in its substructure. This is where imagination and creativity arise. Understanding a building by the architect must first be perceived as understanding mentally. Looking at a building from a distance or seeing it from its photograph is not enough to understand the spirit of the space. Abstracting and sketching means concentrating on the building intellectually and internalizing it. In addition to all these, talking about the basic qualities of architectural structures, spending time next to the building, absorbing its soul and feeling its textures are also important parts of understanding the building in terms of architecture. This study will try to explain how the architect obtained the experience of thinking and understanding by sketching by focusing on the concept of architectural sketch in its steps. The architectural sketch studio, which was established for these purposes, started as a platform that was established in a virtual environment and communicated online. It is an environment where designers, who stay away from sketches due to the pandemic, meet once a week and experience different techniques to contribute to their thinking, imagining and creative actions. The aim of the establishment of this workshop is to make the architects experience the practical ways of sketching, which they approach and hesitate with fear, and to contribute to their development by providing continuity. With this studio, which was established to explain the experience of sketching learning to individuals as an alternative education methodology, it is aimed to be a new approach to changing educational environments and learning styles. For this purpose, a sketch studio was formed, sometimes in a workshop next to the building, sometimes as an online activity, meeting regularly every week. The most important acquisition of the workshop was to explain that the architectural sketch is not only a means of representation, but a means of understanding and thinking. In addition to this, a part of the place that touches the spirit of the place, which is enjoyed and produced products is brought to the individuals.

1.Introduction

1.1. What is Architectural Sketch?

Sketch means "first idea, preliminary study, draft" as a word. It is a term generally used in the art of painting. Sketches are short and serial drawings that the artist aims to analyze on the model before he starts to draw his picture. In architectural drawings, sketching can also be expressed as trial drawings made by hand on paper or abstracted schematic drawings before modeling.

Architectural sketching is not a drawing technique but a way of thinking. It is the act of imagining a structure or a building conceptually and understanding its essence. For this reason, painting or drawing should not be confused with sketching. Sketching is an emphasized and effective tool that reveals the architectural quality as an act of animation in the mind.

Architectural sketches of buildings, cities, streets are made by looking from a visual as well as on-site. Of course, these sketches cannot replace sketches made by feeling the space. However, sketches of original ideas, schemes, abstracted drawings cannot be made by looking at the visual. This is copying and it would be disrespectful to the artist's work. Therefore, idea sketches are made with individual drawings only and must be original.

The steps of the sketching action are explained to the workshop participants who come for this purpose. The fine line between looking and seeing is mentioned. The aspect ratios, volumetric proportions, material, and texture details of the structure in the picture seen, and the spirit of the space are explained, and the participants are allowed to explore. To comprehend all these, the spirit of the environment is prepared as sound, music, smell, and taste according to the structure to be sketched. This is for the multi-sensory and synesthetic content of the sketch.

When the process of architectural education and the phenomenon of architectural sketch is observed, the change it has experienced from the past to the present can be seen. It is seen that the students searched and found different learning channels, and they also went through an educational process outside of school.

In architectural education, design studios are the locus where students weave their knowledge and skills gained through other formal, non-formal, and informal learning into designing (Sipahioğlu, Alanlı, 2020).

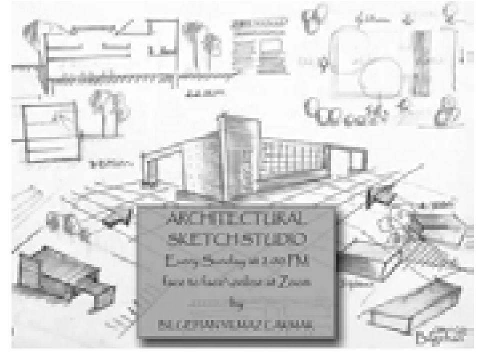
Over the last fifteen years, apart from compulsory curricular studios, extracurricular intensive studios in architectural design (ISAD), commonly known as workshops, have become a mainstream educational environment worldwide. ISADs cover an actual weight in non-formal architectural education (Sipahioğlu, Abbas, Yılmaz 2021)

1.2. Workshop

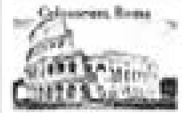
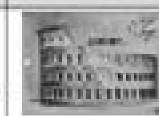
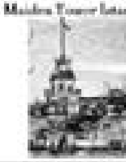
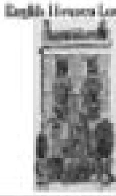
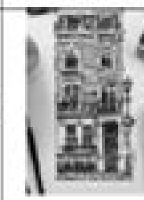
The architectural studios formats and studio operating styles changed in this period. And differentiate by using alternative learning and teaching methods. In this study an alternative architectural sketch studio experience presented. And as a question, can we imagine new ways of sketching, and design thinking? Maybe it can be called as Workshops...

"Workshop" is an applied teaching method to work, think, learn and a tool to create ideas and make decisions in a disciplined way. Especially in the academic environment, it is used as a tool for professional teaching and information transfer "with access to information" in terms of competence given to the student (Orhan 2017). Figure 1 is a sample architectural sketch studio workshop on pandemic period.

The table given below is an example of some of the architectural sketch studio's multi-sensory sketching experiences. As can be seen in the example, the architectural building, the type of sketch, the type of pen and paper used, the coloring technique, the music listened to with sketches and the taste you drink are indicated.



The table given below is an example of some of the architectural sketch studio's multi-sensory sketching experiences. As can be seen in the example, the architectural building, the type of sketch, the type of pen and paper used, the coloring technique, the music listened to with sketches and the taste you drink are indicated.

Architectural building	Sketch format	Pen / Pencil style	Paper style	Colouring format	Music style	Taste Flavor	Sketch
Colosseum, Roma 	Pencil drawing	Pencil Pen / Inkdraw Marker	White textured thick paper	Crayons Pastel Marker	Italian musics *O Sole Mio *The Godfather Waltz	Filter coffee *Cupcake	
Pagoda, Chinese Budist Temple 	Pencil drawing	Pencil Pen / Inkdraw Marker	White textured thick watercolor paper	Watercolor Marker	Chinese musics *Zen *Flute *Mystic musics	Chinese Tea with a ritual	
Maiden Tower Istanbul 	Pencil drawing	Black and White Ink pen Marker	Kraft Paper	White Crayon, Pastel, Marker	Turkish musics *Violin *Hamam	Turkish coffee	
Ankara Palace 	Pencil drawing	Pencil Pen / Inkdraw Marker	White textured thick watercolor paper	Crayons Pastel Marker	Turkish Republic ceremony musics *André Rieu Dmitri Shostakovich, The Second Waltz	Filter coffee / Turkish Tea	
English Houses London 	The copy of Phil Malts sketches (learning from Phil Malts)	Pencil Pen / Inkdraw Marker	White textured thick watercolor paper	Watercolor Marker	English musics *Beatles	English tea with milk	

Architectural sketching takes place in the life of the designer as a sensory and intellectual experience. This multi-sensory experience occurs primarily by feeling and being in and beside the space and by experiencing it one-on-one. Touching and physically being with the architectural structure is the most important and first step in understanding the structure. In COVID-19 pandemic, when physical experience could not be done, a multi-sensory spatial experience was provided with audio descriptions, descriptions and texts describing textural feelings.

1.3. Spatial Experience (Embodied Experiences)

The link between multi-sensory experiences and wellbeing is recognized and has been documented across a broad range of practices, including architecture, interior design, urban design, anthropology and environmental psychology.

In the wake of the COVID-19 pandemic, touch, direct skin and body contact, has become problematic, especially in the public realm. Due to obvious health concerns, we have learned to wash our hands, to protect our faces and stringent restrictions have been put in place. People may feel cautious, even concerned, about touching surfaces and others. Touch, which enables us to intimately connect with the world and which until now we took for granted, is now perceived as a risk, impacting on spatial and social encounters. (URL 1)

Considering that touch is such an important first impression tool, a sketching action without touch would be insufficient. In this case, guidance is made with some instructions in order to feel the place before the sketch and to have a sensory experience. These directions allow to find the architectural codes that need to be captured in the space and to determine the architectural features. The approach to the building is the texture of the surrounding landscape or public spaces, the building material and quality, feel, color layers, roughness or smoothness... etc. It is tried to be felt by talking qualitatively.

1.4. Indicative content

What do you see, smell/taste, hear, touch? How do you and others move through the building? Can you identify perceptual thresholds and boundaries? Are there any sense marks? Don't try to document everything. Capture the essence of how the space resonates with your senses (URL 1). These are the main subjects participants discuss and some drawing while discussing (Fig.2)

1.5. Atmosphere

Feeling the spirit of the space includes, walking around the building, observing its surroundings, perceiving the building near and far away, and spending time there. These actions help to find the most suitable angle to draw the structure and ensure seeing from the correct point. The step of sketching the building should not be started without these actions. The most crucial aspect differentiating workshops from formal settings lies in the atmosphere or ambiance that releases students from restrictions of formal processes (Orhan 2017).

With this atmosphere, the architectural sketch workshop became an alternative education environment that designers and students applied.

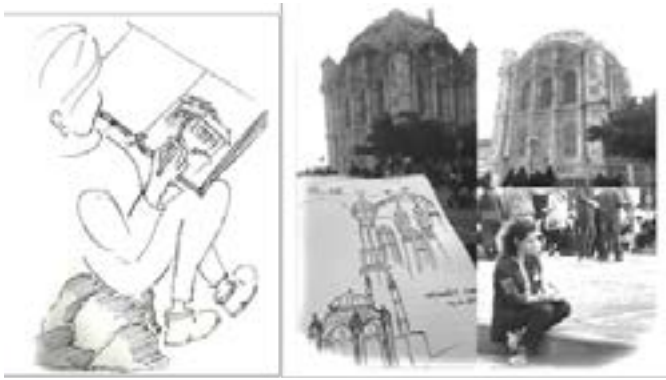
The steps of the studio are given in the table below. These steps are discussed before the workshop and it is emphasized that it should be started by feeling the spirit of the sketch without haste. An architectural work of the building is made by seeing the sketch of the city. Seeing is different from looking. Appropriate environment and desire are required to see it.

2. Method

In the study, an experimental studio work process was tried on an observations and literature-based base. For the empirical study, an 8-item theory-based practice schedule was prepared. Data were obtained by applying these eight steps in each experimental activity. On figure below the methodologic approach of the study can be seen.

2.1. See/Feel

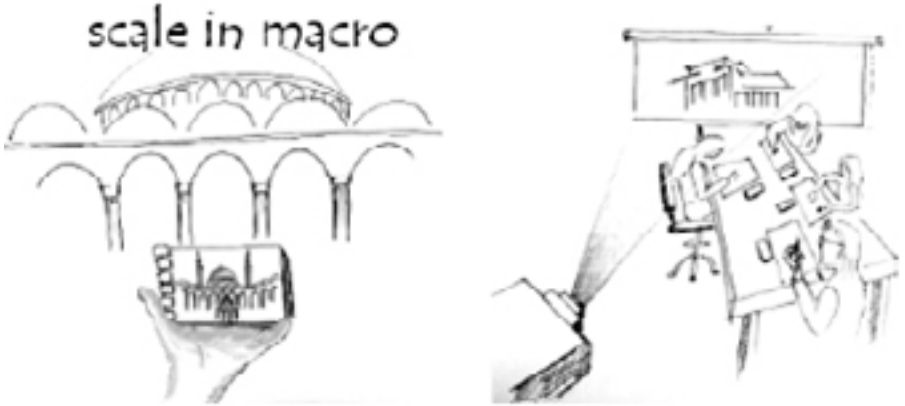
Architectural sketching begins by seeing for a good start. It is important to walk around the building, perceive the environment, sit in a comfortable place and observe for a while to feel the architectural space and soul of place (fig.4).



2.2. Scale / Ratio

The issue of scale always comes up as a fundamental problem in architectural sketching. Perceiving the big building we stand near, scaling it in mind and putting it on paper is literally a mental sketching activity. It is necessary to scale the frame that the eye perceives with the angle of the eye and the frame limited by the paper and repeat this simultaneous activity with every touch of the paper.

Macro scaling may not always be used. Sometimes we draw by looking at an image from a mobile phone or a small photo on a journal. In this case, reverse scaling and enlargement will be required (fig.5 scale in micro and macro).



2.3. Multi repetitive experience

Try lots of alternatives to think more and create the best version. The more we repeat scaling, the more our way of seeing and perceiving will improve at this rate. At this point, repeating and drawing the same sketch from different angles has an important contribution. No matter how many we draw, the aim is not to draw better, but to understand the work we see and transfer it to the mind.

The act of seeing, which is the basis of architecture, will turn into usable information only when it turns into a sketch. The more sketches it means to see and understand different points.

2.4. Writing with drawing

We have said that architectural sketch is a way of perception and learning to understand a building, space or structure. In order to transform the information that remains in our minds after the act of seeing into usable information, we refer to another recording platform, writing. In fact, writing is in a sense an act of drawing. Architectural note-taking is the act of embodying the abstract and circulating data in the mind and saving it as core information. It is a preliminary draft work for architectural sketching.

2.5. Drawing together

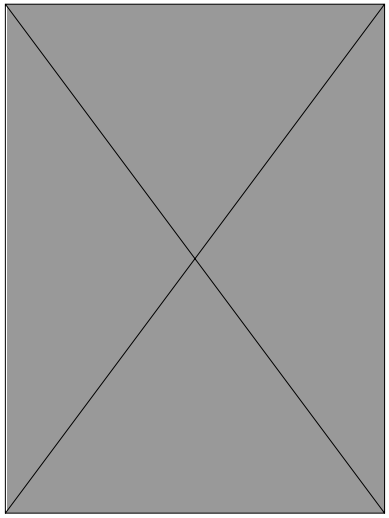
In the process that leads to architectural sketch, another important step in seeing, feeling, writing and drawing is the step of watching. In order for hand-eye coordination to develop, it is necessary to watch videos or observe someone who sketches. Although seeing is a mental and individual activity, sharing what is seen, knowledge transfer and cooperation are essential for an efficient sketching workshop.

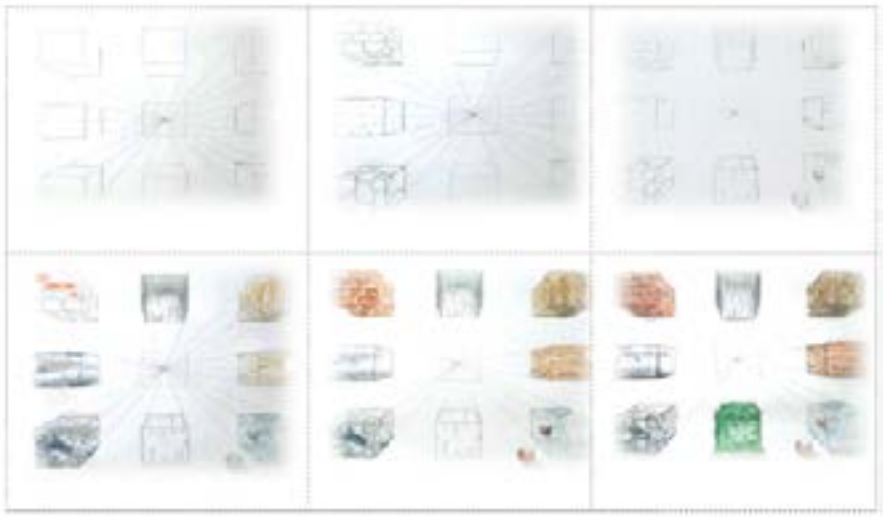
Also the experience of how to start drawing, what kind of questions are asked while drawing, and the experience of drawing together to start over or see mistakes is useful for learning.

2.6. Color as a tool

In architectural sketching we use just a standard sketch pen as a basic element because the priority action is understand and learn. In this context, even a pencil seems enough for sketching. But the creative and intellectual process forces us to better express what is visible or to add individual design elements.

An individual with design education knows how and for what purpose to use colors. Transforming it into an artistic object or adding an artistic touch is inherent in the sketch. Architectural sketching is not only a technical but also an artistic learning tool.





2.7. Material as a tool

After all the dimensional experiments, scaling, writing, drawing and color alternatives, it is seen that the act of drawing has turned into an artistic activity and causes transformations by integrating with architectural creativity. Different pens, different techniques, bring different perspectives, and illustrators use their sketching skills repeatedly in different environments. This action is the transformation of architectural sketch into not only a learning tool, but also a passionately produced creativity and production tool. In the architectural sketch studio, participants are asked to try out such action as seen on fig.11.

2.8.Record the process

Every product produced in an architectural sketch studio is actually a process. Learning, perception and understanding continues throughout the process. Although the final product in the sketch is not important, it needs a feedback tool as it guides the next sketch action. At this point, recording, telling or watching is an important feedback activity.

Table 3 shows some of the records made by the author from the works produced with the participants in the architectural sketch studio. The location, music selection and acceleration techniques in the recordings are valuable in terms of simplifying the process.

3.Findings and Discussion

At the end of the "Architectural Sketch Studio" workshop process, the increase in the conceptual thinking skills of the participating members and students and the success they achieved in the architectural sketch studios given them within formal education show us that

-Sketching has an important place as a learning tool in architectural education.

- The integration of all theoretical or theoretical information with the act of drawing is necessary for the realization of learning.

-Architectural sketching is a multidisciplinary process with a technical and artistic dimension.

- It can be used alone as an alternative learning tool within the developing technology and changing education methods.

	Material Detail sketch https://www.youtube.com/watch?v=mikVInvBtWM&t=258s	
	Mimar Sinan Selimiye Mosque sketch https://www.youtube.com/watch?v=U-e-dFf73-Q&t=117s	
	Landscape sketch https://www.youtube.com/watch?v=PHs1NDFdwWY	
	Tantavi Sketch https://www.youtube.com/watch?v=d3xb7Sj2Z0U	
	Lala Hüseyin Paşa Mosque Sketch https://www.youtube.com/watch?v=UNmRIIuvCFb4	

-Architectural sketch studio is an efficient and effective tool as a personal and online education tool during the pandemic period.
-Architecture develops by producing new ways of doing it. Learning with sketching is a form of making whose presence is stronger in architectural practice.

4. Further Research

How architectural education adapted to this transformation in the process of changing educational system, new learning methods and technological developments. It is unthinkable that this field of science, which is integrated with art and technology, continues with the education methodology that has been continuing for centuries. Is it possible to "learn with sketches", "teach with sketches" and "experience with sketches" during this transformation process of architecture education? Can architectural history, basic building information, form and structure information and building details be explained in an architectural sketch studio? Can "education by drawing" be thought of as a new architectural education? Why not...

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URL 1: https://spatialexperience.myblog.arts.ac.uk/

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Note: You can visit Youtube / BILGESEL or http://www.bilgehanyilmazcakmak.com/eskiz-galeri.html to access all of the records with different sketch types.

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Sustainable Interior Architecture Education: Contents Taught to Interior Architecture Students in Turkey

Begüm Gökdağ[a], Simay Özkan[b]

[a] Department of Interior Architecture and Environmental Design, Graduate School of Fine Arts, Hacettepe University, Ankara, Turkey
[b] Department of Interior Architecture and Environmental Design, Faculty of Fine Arts Design & Architecture, Atılım University, Ankara, Turkey

Keywords: Sustainability, Interior Architecture, Sustainability Education, Sustainable Interior Architecture

Abstract As the first quarter of the 21st century is about to be completed, the world is dealing with many environmental problems and it is predicted that the situation will become more dire every year unless the sustainability philosophy is implemented. For this reason, in order to educate the decision makers and citizens of the future on sustainability, the United Nations defined the period between 2005 and 2014 as “Decade of Education for Sustainable Development” and advocated that sustainability should be taught to people of all ages. From this point of view, many universities have started to include sustainability content in the education programs of occupational groups that support environmental problems negatively. As for interior architecture, in 2006 The Council for Interior Design Accreditation (CIDA) added sustainable design to its interior design professional standards, revealing the need for the interior architect/designer to offer "flexible, sustainable, adaptable design and construction solutions". Since interior architecture is one of the professional groups that play the most active role in the formation of the built environment, it is very important for future interior architects to meet sustainability in their education life and learn both theoretical and practical knowledge.
As stated in the UNEP (2020) report, buildings constructed or to be built in developing countries are a potential source of carbon emissions. In this study, the existence of sustainability in interior architecture departments in Turkey, a developing country, has been analyzed and a research has been conducted on which contents of sustainability Turkey teaches the interior architects of the future.

1. Introduction

As the first quarter of the 21st century is about to end, the world is busy struggling with environmental problems that have been brought about by uncontrolled industrialization, fossil fuel consumption, population density, etc., since the Industrial Revolution. While the ecological crisis manifests itself in concrete terms with wildfires, air pollution, drought, and climate change all over the world, it started to affect human beings economically and socially. In today's world, measures to be taken for environmental problems that have begun to affect daily life have become essential. In this sense, the United Nations has defined the current period of 2020-2030 as a "Decade of Action" and called on the world for the solution of various problems, including climate change.

The global call, published by the United Nations in 1987 as the Brundtland Report, defines sustainability as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs". In the projection made by the United Nations for the year 2030, the scope of sustainability has been expanded and sustainable targets have been determined in 17 different areas, from education to health, from affordable energy to sustainable cities. In the report published by the UIA (2018) for the UN 2030 targets, it is stated that building design is included in all 17 targets and this coverage is not only taught in theory, but also realized with buildings and cities built all over the world. In other words, it is very important for city planners, civil engineers, architects, interior architects, designers, and other professional groups that have a direct or indirect relationship with building design to be aware of sustainability to realize the 2030 goals of the United Nations. One of the important tools to be used in creating this awareness is education. In this sense, the United Nations declared the period of 2005-2014 as the "Decade of Education for Sustainable Development" and aimed to use educational resources to make the world more sustainable (UNESCO, n.d.)

The United Nations expects every individual, regardless of age and profession, to be aware of this issue. Considering that more than 80% of decision-makers in industry, politics, and society are university graduates (Scott & Gough, 2004)sustainability education must be given at the higher education level. In this sense, especially those who will work in the construction sector in the future should have an idea about environmental problems and the solutions that the construction sector can bring to these problems. Especially the interior architecture sector has more impact on the environment than most professional groups. The choices made by the designer in building elements such as materials, furniture, interior lighting, etc., which are included in the job description of interior architecture, have a positive or negative, direct effect on environmental problems (Dodsworth, 2009).

Council for Interior Design Accreditation (CIDA) defines the relationship of interior architecture and sustainability as “human-centered strategies that may address cultural, demographic, and political influences on society. Interior designers provide resilient, sustainable, adaptive design and construction solutions focusing on the evolution of technology and innovation within the interior environment...”. In addition, The International Federation of Interior Architects/ Designers (IFI) states that interior architecture/design is a professional group that finds solutions to human needs, that resources should be used sustainably and economically, and that design includes health, well-being, and safety (IFI, 2020). Considering that today's students are the designers of the future, environmental concerns and the design solutions that can be brought to them should be taught to the students in university education (Özer & Turan, 2015). For this reason, it is necessary to add the content related to sustainability to the interior architecture curriculum and to teach that sustainability is a part of the design.

1.1. Education for Sustainable Development (ESD)

Education is one of the most important elements that prepare the decision makers and citizens of tomorrow for the construction of a sustainable future and is one of the basic conditions of sustainable development. However, the current level of knowledge of the society unfortunately does not include solutions to global environmental problems and the economic, environmental and social problems that will arise from them. Therefore, sustainable development education should be at the center of future planning (UN, 2012a).

For this purpose, a global education campaign called ESD was announced through UNESCO in 2004. This campaign emerged as a program that aims to provide students with critical perspective as well as imagining future scenarios (Özsoy, 2015). ESD has four purposes such as; ensuring equality in education, revising existing education programs according to sustainability, raising awareness of the society about sustainability through education, and providing training to professionals (UN, 2012a). The purpose of ESD is to integrate these four goals into every education people receive, from early childhood to higher education and workplace learning (UN, 2012b).

1.2. Environmentally Sustainable Interior Design (ESID)

According to the "Global Status Report for Buildings and Construction" published by the United Nations Environment Program in 2020, the energy consumed by the construction industry is at the level of 55% on a global scale. In the same report, the rate of carbon emissions caused by the construction industry reached the highest level, 38%, in 2019 on a global scale. New buildings, especially in developing countries, are a potential source of carbon emissions (UNEP, 2020). Therefore, stakeholders in the building sector have a lot of work to do in terms of sustainability.

The only way to achieve this is through education. As seen in the definition of interior architecture made by CIDA, interior architects must create their designs with people in their focus. In addition, sustainability, which is one of the most important needs of today, is a concept that directly concerns the interior architecture profession, as it increases the user's experience in the building without harming natural resources. (Mendler & Odell, 2000).

In the literature, it is possible to be encountered with many terms such as; net-zero building, zero-carbon building, carbon-neutral building, zero-energy building, green building, sustainable building, environmentally sustainable design etc. Although they all seem to refer to the same building type, there are slight differences between them. According to Brayley (2010), "Net-Zero" is a building that produces in the amount of energy it consumes. "Zero-carbon", on the other hand, is very similar to a net-zero building, where they differ is the design that focuses on achieving zero energy use on an annual scale by averaging the energy consumed and produced by the zero-carbon building. (Tucker, 2014) Another type, "carbon neutral", is a definition that emerged on the basis of measuring and balancing or even reducing the carbon energy consumed by the structure and its users (Carruthers, 2013). Finally, the US Department of Energy (DOE) defines a zero-energy building as a structure that focuses on producing as much energy as it uses throughout the year (Tucker, 2014). Besides these terms, the terms that are most confused in the literature are green building and sustainable building (McLennan, 2004). According to the definition of the World Green Building Council, a green building is a structure that reduces or eliminates the negative impact of the building on the environment during the design, construction and use phases. In order for a building to be a green building, it should use energy, water and other resources efficiently, benefit from renewable energy sources, have waste management, have good indoor air quality, support recycling, use non-toxic materials in its construction, etc. In sustainable design, the aim is to protect energy resources, adapt renewable energy resources to building design, help protect biodiversity, observe environmental effects in material use, etc. Social equality, economic well-being, ecological protection are the main concerns of sustainability (Jaffe et al., 2020). McLennan (2004) describes sustainable design as “a philosophy that seeks to maximize the quality of the built environment, while minimizing or eliminating negative impact to the natural environment”. The most distinct feature that differentiates sustainable design from green building is that, while the primary design decision in green building is to protect human health, in sustainable building, design decisions are taken according to the protection of the world’s ecosystem. In other words, green building has a micro perspective, while the sustainable building has a macro perspective. Environmental sustainable design is a combination of green building and sustainable building terms. While designing the building, both the user of the building and natural resources are considered. (Jones, 2008). This term is also referred to as ecologically sustainable design in the literature (Ghaffarianhoseini, 2011).

1.3. Principles of Sustainable Interior Architecture Education

Since sustainability is the result of the joint work and ideation of the stakeholders, the way for the building to be sustainable, especially in construction activities that are very harmful to nature, is the way of all decision makers (scientists, environmental activists, financial institutions, engineers, architects, interior architects, etc.). take an active role in sustainability (Stieg, 2006). Hartman (2012) agrees with this view with the following sentence; "sustainable design does not happen by itself". This type of teamwork is unthinkable without the professional group that makes up the interior space. Therefore, not only interior architects, but also every professional group dealing with every unit that makes up the building should receive training on sustainability and learn to practice their profession from this perspective.

Stieg (2006) calls the sustainability education of interior architecture students mostly theoretical and the inadequacy of the application part as the "sustainability gap" and draws attention to the fact that this gap can be filled in five stages such as; connection, knowledge, process, practice and commitment. The first step, which the author calls "connection", enables the student to learn why sustainable design is necessary and to establish an intellectual and emotional connection with the natural environment. The "knowledge" step is defined as learning about the damage of human activities on the natural environment. In the third step, "process", it was stated that the interior architecture student should be taught more in-depth information about materials, the effects of materials on the natural environment and the ways of adding sustainable building materials to the design process. Stieg states that the interior architect should know how to explain the need for an existing or new building to be sustainable to client and stakeholders. For this reason, the author thinks that interior architecture education should be given with a focus on professional expertise. In the fourth step, "practice", the relationship of the building with neighboring buildings and natural environments, infrastructure, the effects of infrastructure on interior architecture, methods that can be used for resource efficiency, flexibility of designed areas, indoor daylight control, use of energy efficient artificial lighting, etc. mentions the necessity of having knowledge about such matters.The last step, "connection" stated to raise awareness of sustainability in the student and to teach that sustainability is a philosophy of life. According to the author, it should be taught that sustainability is not a formula that can be adapted to every structure, and that an in-depth research should be done for each project.

2. Methodology

This study was conducted with qualitative research methods. The starting point of the research is to understand the place of content related to sustainability in interior architecture departments in Turkey. After the analysis, a study was conducted on which content about sustainability was taught. For this, a sample group was formed from the interior architecture departments whose weekly curriculum was accessed. The universities forming the sample group are as follows, in alphabetical order; Ankara Bilim University, Antalya Bilim University, Atılım University, Bahçeşehir University (BAU), İstanbul Bilgi University, İstanbul Gelişim University (İGÜ), İstanbul Kültür University (IKU), İstanbul Technical University (İTÜ), Sabahattin Zaim University (İZÜ), Toros University and Yeditepe University.

The selected courses of the sample group were balanced with theoretical knowledge and project, if any. For this reason, the courses that were completely taught as project were not included in the analysis. While analyzing, all of the compulsory and elective courses were examined and the ones that met the criteria were included in the analysis. The contents of the courses belonging to the sample group were obtained by examining the weekly course schedule published on the websites of the universities. After the results obtained from the curricula, a table was created and the contents taught to interior architecture students about sustainability in Turkey were found.

3. Results and Discussion

The least content related to sustainability in the examined sections is found in Yeditepe University and Istanbul Gelişim University, respectively (Table 1). According to the published syllabus, the only content Yeditepe University teaches about sustainability is basic information about energy efficient buildings. In Istanbul Gelişim University, on the other hand, there was only one course in which the history of sustainability and renewable energy sources were explained. The department with the highest number of course content related to sustainability within the sample group is the interior architecture department of Istanbul Bilgi University. The topics covered in the courses can be briefly summarized as sustainable development, green building certification systems, passive/active systems, thermal comfort, water conservation, green buildings, recycling, sustainable building elements, performance-based calculation and BIM. The most striking development that emerged in the analysis is that Bilgi University offers some courses on sustainability in summer school, as a summer camp outside of Istanbul.

In the analysis, it has been understood that passive and active systems, green building certificate programs, thermal comfort, daylight control in spaces, water conservation and sustainable building materials are in demand by the departments. On the other hand, no content related to waste management and vernacular architecture was found in any interior architecture department in the sample group.

However, especially waste management should be included in interior architecture education because buildings produce solid wastes throughout their life cycles, which have negative effects on the environment (Lu & Yuan, 2012). Especially the wastes caused by construction materials are the most difficult type of waste to be eliminated (Kareem & Taiwo, 2006).Since interior architecture has a direct relationship with the building materials, especially the interior architects of the future should learn the problems and solutions related to the building material wastes.

Content of the Course	Name of the University										
	Ankara Bilim University	Antalya Bilim University	Atılım University	Bahçeşehir University	Bilgi University	İstanbul Gelişim University	İstanbul Kültür University	İstanbul Technical University	İstinye Üniversitesi	Yaşar University	Yeditepe University
History and Definition of Sustainability	✓				✓	✓	✓				
Environmental Problems and Renewable Sources	✓					✓	✓			✓	
Green Building Certificate Systems				✓	✓			✓	✓	✓	
Energy Efficient Architecture: Passive and Active Systems	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓
Artificial Light and Daylight		✓	✓	✓				✓	✓	✓	
Thermal Performance and HVAC	✓	✓	✓	✓	✓			✓	✓		
Waste Management											
Water Conservation	✓	✓	✓		✓			✓			
Sustainable Building Materials	✓	✓		✓	✓			✓	✓	✓	
Recycling				✓	✓						
Energy Retrofit and Adaptive Re-use					✓						
BIM Modelling					✓				✓		
Vernacular Architecture											
Biomimicry		✓					✓				
Slow Movement							✓				
Sustainable Cities	✓										
Local and Global Sustainable Building Examples	✓							✓	✓		
Human Health								✓			
Environmental Psychology	✓	✓						✓			

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Demolition as a Sociological Concept in Architecture

Gülçin Erdaş[a], Fatih Semerci[b]

[a] PhD Programme in Architecture, Institute of Science, Necmettin Erbakan University
[b] Department of Architecture, Faculty of Fine Arts, Necmettin Erbakan University

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Abstract Architecture is a discipline whose sociological aspect is as important as its technical and aesthetic aspects. The architectural duality of constructing and demolishing can be assessed from a technical and aesthetic perspective but a sociological approach is still needed to thoroughly understand this duality. Building or constructing may be associated with sociological reasons or mostly with the process of meeting an essential need but demolishing is largely a sociological and psychological phenomenon. The demolitions that are often mentioned in the current architectural agenda, vandals' actions, decisions on terminating the collective memory and corruption in the social awareness require finding a meaningful answer to the question "why do people construct and demolish later?"

1. Introduction

The concept of architecture evokes the actions of producing, designing, constructing or "building". Most constructions have an invisible aspect: demolition. Based on the philosophy that every subject or object is present with their opposite, it is safe to state that every demolition is a construction and vice versa in architecture. Furthermore, presenting ideas on the action of demolition rather than construction may yield a different perspective for architecture.

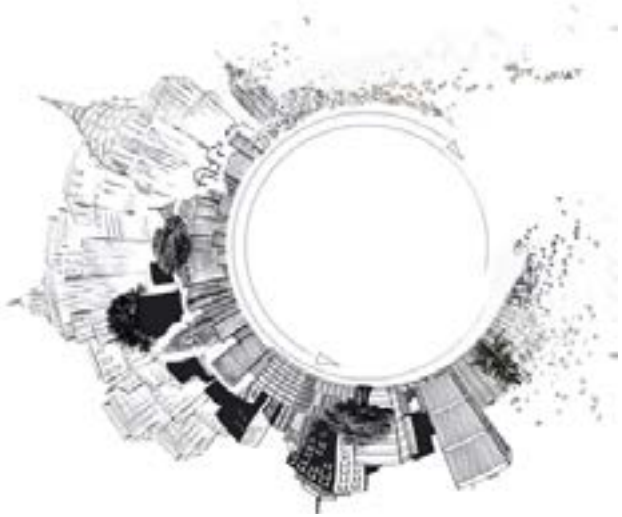
Although demolition etymologically indicates an adverse connotation, it is a part of architecture as a necessary element, which is also the case for construction. There is no architectural approach solely based on construction. The main point here is the cause, occurrence and result of demolition. Assessing demolition from different aspects will help us approach to the topic from a broader perspective. This study aimed to reveal the relationship between constructing and demolishing, to classify the types of demolishing, and to question the reasons for demolitions through the collective assessment of different and opposite ideas.

2. Focus of Research

The focus of the present study is to direct the readers to question and support the future studies with different perspectives by approaching the architectural phenomena or duality of constructing and demolishing from a sociological perspective, rather than setting rules with precise and general limits.

3. Method

The main research problem of this study is based on two main topics: The psychological and political aspects of demolition. As every demolition is a psychological event with causes, occurrence and results, the psychological aspect of demolition was assessed first, and this dimension was analyzed in terms of vandalism and aggression. The political aspect of demolition was assessed within the context of modernism as the relationship between architecture and demolition began to be visible with modernism. Memory, forgetting and remembering, which are among the concepts that should be assessed as another aspect of demolition, were analyzed under a separate title within the intersection of psychology and policy.



3.1. Understanding a Dialectic: Constructing and Demolishing

The dialectics of constructing-demolishing and constructing-demolishing should be assessed to understand the concept of demolition. Turkish Linguistic Society (TDK) (2020) defines these concepts as follows: *constructing, presenting, fulfilling, building, making; construction, the act of constructing, building, manufacturing, construction; demolishing, distorting an already-built platform or object, breaking, destroying; demolition, the act of demolishing, something that may cause termination, great loss, disaster.*

The acts of constructing and demolishing essentially refer to the architectural fields of production and consumption, and the relationship between architecture and creation helps establish a deeper connection between "making" and architecture. This association directs people to call all sorts of demolitions that may happen during this "making" process as a construction (Çetken, 2011: 8). Demolishing to construct or the necessity of demolishing after the construction reveals the strong ties between the pace of production and consumption, and construction and demolition. Accordingly, it is safe to assume that "every construction has an essential relationship with demolition".

The classification of demolitions as natural demolitions and human-triggered demolitions[1] indicates that the latter is among the basic architectural problems and has a quite interesting association with "construction".

Natural demolitions are natural acts. People distort the balance of the ecosystem and have an indirect role in triggering natural disasters, but natural demolitions occur with no human impact or under no human will or control. The occurrence of natural demolitions cannot be prevented, and most of the disasters cannot be predicted. However, people have a great role in developing practices and technologies that will minimize the damage as well as financial and spiritual losses arising from natural disasters. Human-triggered demolitions refer to the acts of demolishing assessed under the titles of ecological, technological, social, psychological and political demolitions.

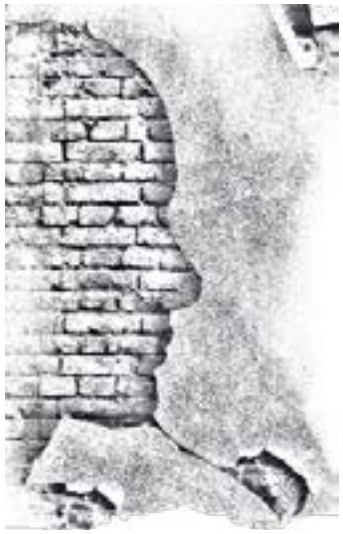
[1]Classification was performed by the author considering the disaster types set by AFAD (URL2) and literature reviews.

3.2. Psychological Aspect of Demolition

Protecting or demolishing can be associated with three moods: adopting, getting used and splitting. Adopting a work or object indicates accepting or claiming; getting used refers to becoming familiar, getting bored or becoming resistant; and splitting means distorting the unity. Splitting also reveals one's attitude toward the society, system, order and space. (Tarakcı, 2003: 17; TDK, 2020). Every demolition starts after getting used. Every value or art piece that is understood, undiscovered or neglected unfortunately faces the danger of disappearing.

Demolitions are directly related to human psychology considering their causes and results. This relationship is established through the stages of occurrence and result in natural demolitions, and through the causes in human-triggered demolitions. For instance, occurrence of an earthquake and experiences after an earthquake area a great trauma for human psychology. However, the reason for the occurrence of this disaster is not questioned. The human-triggered demolitions may be based on many psychological reasons such as aggression, vandalism, display of force, termination of collective memory, or relevant interests, even if these demolitions occur upon a political reason. The psychological aspect of demolition is examined under the titles of aggression and vandalism/destruction-based actions.

"Aggression and violence are the uncontrolled and irregular impulse that targets, destroys and demolishes natural and objective beauties, art pieces, items, goods and other objects. This impulse is a derivative of aggression, the source of violence" (Köknel, 2001). Aggression is based on many psychological or social reasons such as concerns, anxiety, anger, fear, hatred etc., and it is individually and socially effective considering its results. While experiencing the time and space, people need certain thresholds and referential points, and termination of these elements turns into the attacks targeting human body in addition to being a loss on urban scale (Connerton, 2012: 120, 124).



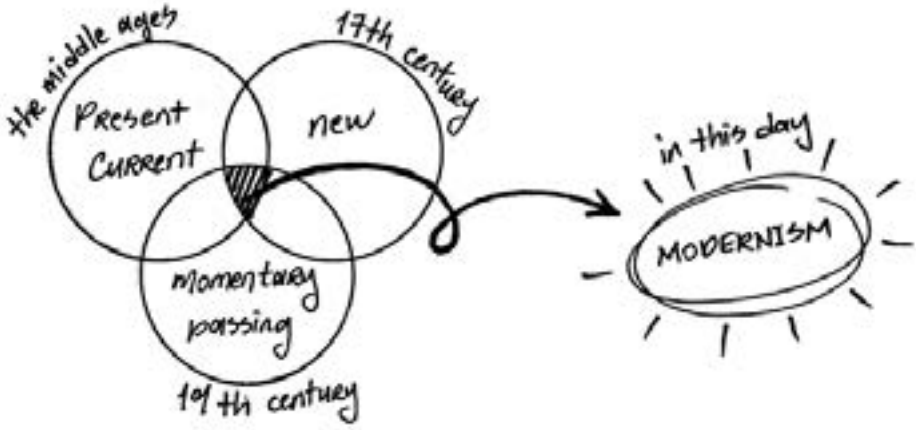
One of the basic expressions of aggression is vandalism, which may also be called "destruction-based action". The term vandal indicates the people or society that destroy old cultural and artworks or that do not consider the value of these, while vandalism suggests the thoughts and attitudes of destroying old cultural and artworks or the orientation to become a vandal (TDK, 2020).

There are multiple disciplines examining the reasons of vandalism, and every researcher from different fields has presented a theory suiting their own perspectives. In its broadest sense, vandalism can be divided into two as purposeful and non-purposeful: Purposeful vandalism indicates the actions performed to obtain a financial gain, to express adverse feelings toward any event, person or institution, or to submit a message, while non-purposeful vandalism suggests the actions performed unconsciously due to psychological disorders, boredom, interest or the desire of playing (a game) (Türkoğlu, 1990; cited by: Tarakcı, 2003: 18-22).

A psychological feeling is occasionally expressed through aggression or artistic actions. People's orientation to assign aesthetic value to the vandalism-based actions during these expressions is interesting. New buildings may be valuable or beautiful for some, while ruins may be appealing to some. Most of the buildings that turned into ruins become abstract sculptures. Accordingly, Rodin states that every piece of a beautiful sculpture is actually a sculpture itself, while Bernardin de Saint-Pierre claims that the ruins of a beautiful architectural building are also beautiful. In the period at the end of the 18th century and beginning of the 19th century, people constructed virtual ruins in the yards of their palaces, mansions and estates, and painters painted the pictures of ruins. They even painted the standing buildings as ruins. People even developed the concept of "aesthetics of ruins" in time. Moreover, many researchers claim that there is an ontological relationship between art and demolition (Tümer, 2006).

3.3. Modernism as the Political Aspect of Demolition and Demolition

The concept of modern etymologically indicates three suitable and essential meanings: The first is "now" or "present" as the opposite of the past. This meaning was utilized during the Medieval ages. The second is the "new" as the opposite of the old. This meaning became popular in the 17th century. Finally, the third is "momentary" or "temporariness". This meaning became important after the 19th century. What is understood from the term "modern" in the current times is the synthesis of these three meanings: up-to-date, new and temporary (Heynen, 2011: 21-22).



The relationship between modernism and architecture is often questioned through demolition. Construction and demolition have taken place in every place and time in which people have been present but the process of demolition in the background of "construction" is specific to modernism. Many sociologists, architects and researchers have agreed upon the destructive traits of modernism.

Modernism is a breaking point and the most destructive ideology of the 21st century. Many capitalists as well as communists, dictators and democrats have adopted this ideology. The destructive traits of modernism not only destroy the past, but they also form a vicious circle that destroys itself, builds the new, always becomes temporary, demolishes, constructs, or builds to demolish later. Re-construction indicates modernism, while demolishing to construct becomes the most constructive action of modernism (Tümer, 2006; Çetken, 2011: 6; Sezen, 2012: 29; Özberk, 2017: 205).

One of the most important factors behind the transformation of modern construction into the demolition is the order targeted by the modernism. Demolition may appear as a solution in places where this order cannot be established. With that being said, it should be mentioned that a city is not independent from chaos. Instead of establishing the order, one should question whether the newly-constructed buildings are creative or destructive for the city. The option to be selected for answering this question is often the both. A city is the historical space of creative demolition (Özdemir, 2010; Sezen, 2012: 29). According to Tanyeli (2013: 389-391), cities have had no shape, and emphasis has been put on the illusion that modernism is the reflection of urban shape. Cities used to have a shape, but the shape of every physical, social, cultural, religious and urban concept or object was lost in time. Losing the shape means chaos which needs to be terminated. Every person living during the early modern urban planning history has this ideology in their mind, creating designs accordingly, and all Utopian cities are reflected with the rationale of assigning an ever-lasting shape. The most striking example in this regard is New York. Possessing a grid plan, New York is believed to undergo a transformation in a shapely manner. Moreover, the city is constructed with an exceptional architectural variety, has the world's most complicated three-dimensional view and shatters the shape-based ideals.

These relationships between modernism and shape, order and, inevitably, demolition introduce us a new concept: creative demolition. This concept, which was used in many disciplines and proposed by Joseph Schumpeter who was influenced by the financial theories and thoughts of Karl Marx and which was explained by Schumpeter as the process where new buildings are to be constructed after the old ones get demolished, indicates a relationship where demolition and construction are inter-conditioned (Sezen, 2012: 19; Aydın, 2019: 4).

Although creative demolition is defined as a process of construction where new buildings will always exist by replacing the old ones, there is actually no place for the new, and construction by demolition will always be a utopia where the rate of construction does not always match the rate of demolition as noted by Hazır and Deveci (2017: 96).

Figure 1. Haussmann's caricature reflecting the obligatory migrations arising from the demolitions (URL3)

The period when the process of construction by demolition was questioned the most corresponds to the Fall of the Berlin Wall in 1989. Topics such as place and placelessness, memory, identity, or sense of belonging were intensively discussed, and the state of constructing by demolishing was questioned through the lost values. This period of questioning and discussing is still an item of the modern agenda. One of the main examples of construction by demolition or creative demolition is Paris. Using his authority for urban renewal and development in 1850s, Georges-Eugène Haussmann, the governor of Paris during those times, developed an urban transformation model when urban centers constantly renewed themselves to host the bourgeoisie. Modern Paris became a symbol of government with monuments, iron towers and columns, and radical interventions after the places of poverty were eradicated, sewage system was established, public buildings were renewed, squares were formed and broad streets were opened. Construction of an express road in Bronx, New York by Robert Moses in 1953 after displacing approximately 60,000 workers and middle-class people is another example to creative demolition (Berman, 2013: 386; Yılmaz, 2018; Aydın, 2019: 5, 20).

3.4. The Other Aspect of Psychology and Policy Intersection: Memory, Forgetting and Remembering

Memory is defined as the power of consciously keeping what is experienced or learned as well as their relationships with the past in mind, or as the repertoire, mind, memory or intelligence (TDK, 2020). Memory is not solely associated with the past or history. Nora (2006: 19) emphasizes that memory and history is not synonymous. Memory is always open to the dialectic of remembering and forgetting generated by the relevant group, and it is in an ever-developing state. However, history is the re-generation of the things that are no longer present. Memory always indicates a current event or the ties constantly experienced in the current times; history is the reflection of the past.

The concept of social memory was introduced by Maurice Halbwach, a French sociologist, in 1920s. Halbwach claims that the memory is subject to the social conditions, and he examines the memory from the perspective of social environment that is a must for the formation and protection of the individual memory, rather than the biological perspective. Society is the subject of memory and remembering. We need certain figures to perform remembering. As these figures are classified as commitment to time and space, a group, or the self, the commitment to time and space is critical in terms of the present topic. Memory needs space. Figures of remembering are materialized in a certain space. These figures need to be updated at a specific time, and they are based on a precise time and place. Communities aim to create and protect such spaces for their identities and memories. The primary role of space in remembering and strengthening the social memory resulted in the emergence of the concepts of "memory spaces" (Assmann, 2015: 43-47, 68). The concepts of memory, forgetting and remembering have psychological and political aspects. Assmann (2015: 79) explains the relationship between these concepts and governments as follows: The desire of rulers or the government to be remembered cause them to perform unforgettable actions.

In other words, they seize the past and future, and they plan to gain legitimacy for the past and eternity for the future. Therefore, there is a mutual interaction between remembering, forgetting and monuments. The story of monuments that are generally constructed by the government after relevant decisions provides a different perspective to remembering, forgetting and political aspect of memory. Connerton (2012: 38-39) claims that monuments enable remembering certain subjects or objects while causing some to be forgotten through a type of differentiation, helping us to remember and conserve our past. Governments reflect as much as what they aim to show or make recallable. Based on the ideological perspective or power battles of the following governments, the aim of eradicating the memories regarding events, people or institutions may be observed, and demolition may happen. In certain cases, a building may be monumentalized after getting demolished, which is the case for Berlin Wall. People believed that they would not forget what happened by keeping a piece of wall. The process of demolition has turned into an action of construction, and a monument, which has no traces and whose location is open to development in the present times, was built.

How the social memory is shaped in the formation of a nation is critical. Tuğrul (2014) states that the identities of young nations, such as Turkish people, are shaped through the process of forgetting or ways of forgetting set by the governments. Accordingly, there are two ways: The first is the formation of the methods for remembering the past through activities such as rituals, festivals and memorial ceremonies, resulting in the collective memory. The second is that the methods of forgetting are created, and an environment of forgetting is created with consumption models, social life and urban structure; therefore, the demolition of spatial memory occurs. After the demolition of memory, a space can be eradicated much more easily, and nobody will resist to the demolition of a "depreciated building with no identity". In this case, the state of getting used mentioned earlier plays a key role in losing the values and occurrence of demolition. Depreciation of values may occur through a political authority or without any stimuli (in the case of the latter, the most important factor is the non-developed structure of social awareness), which paves the way for demolition. Not every demolition has an ideological cause. In certain cases, the cause arises from the society itself, and the action is performed by the government.

4. Conclusion

People create cities and reflect the traces of their culture and traditions to the cities through buildings, and they aim to eradicate these traces later. Demolishing is a part of architecture like building, constructing or generating, meaning demolition is an ordinary part of architecture. In terms of architecture, perception of "construction" solely is a great illusion. What is important here is the type of demolition. Monuments and buildings that were constructed centuries ago may collapse owing to losing their durability or a natural disaster, which is totally natural. What should be questioned is the conscious or unconscious human-triggered demolitions. The reasons for demolitions may not always be superficial which can be explained through interests or political topics. It is critical to psychologically, sociologically and politically examine the demolitions where people play a primary role and which start with modernism through an interdisciplinary research.

Construction and demolition have always occurred but most of these demolitions were caused by disasters and wars in the past, and the reasons for the demolitions differed especially after the 19th century. According to many researchers, the reason behind this difference is modernism. The demolitions that have happened in time have become visible with modernism. Modernism-related demolitions or the action of construction during modern times are now mentioned as creative demolition. The concept construction by demolition indicates a conditional construction. The condition of demolishing!

Modernism performs this condition to establish a “so-called” order. However, the world or the cities of this world have no order. This search results in demolition.
The fact that most of the demolished buildings have a history or served as artistic, cultural or social assets is the most adverse aspect of demolition. In addition to the artistic value, architecture is the most historical and cultural evidence. With every building getting demolished in time, a historical loss occurs, and cultural values become poorer. The memory and value of a building demolished in a recent period may have a place in our minds which will fade away in time and gain a position as if it never existed. Buildings may be re-constructed but there will be no technology that will re-produce the cultural accumulation as well as the memory and emotions arising from these architectural assets. Being at peace with our history to protect our cultural values, adopting the architectural values instead of getting used to them, and supporting the development regarding the awareness of social protection is critical. The main point here is to protect what is present, although demolition is still a regular part of architecture.

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