

TOBB UNIVERSITY OF ECONOMICS AND TECHNOLOGY GRADUATE
SCHOOL OF NATURAL AND APPLIED SCIENCES

**NARRATIVE ACT IN AN ARCHITECTURAL DESIGN STUDIO:
STUDIO ALTI | ÜSTÜ**

MASTER OF ARCHITECTURE

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Department of Architecture

Supervisor: Prof. Dr. Nur ÇAĞLAR

MAY 2023

DECLARATION OF THE THESIS

I hereby declare that all information in this document has been obtained and presented in accordance with academic rules and ethical conduct. I also declare that, as required by these rules and conduct, I have fully cited and referenced all material and results that not original to this work. Also, this document has prepared in accordance with the thesis writing rules of TOBB ETU Graduate School of Natural and Applied Sciences.

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TEZ BİLDİRİMİ

Tez içindeki bütün bilgilerin etik davranış ve akademik kurallar çerçevesinde elde edilerek sunulduğunu, alıntı yapılan kaynaklara eksiksiz atıf yapıldığını, referansların tam olarak belirtildiğini ve ayrıca bu tezin TOBB ETÜ Fen Bilimleri Enstitüsü tez yazım kurallarına uygun olarak hazırlandığını bildiririm.

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ABSTRACT

Master of Science

NARRATIVE ACT IN AN ARCHITECTURAL DESIGN STUDIO:
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Institute of Natural and Applied Sciences
Department of Architecture

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Date: May 2023

This thesis investigates the creative potential of narrative acts as a design tool and an object through architectural design studios and opens it to reconsideration and discussion in the context of Studio Altı | Üstü, Department of Architecture, TOBB University of Economics and Technology (ETU). Studio Altı | Üstü is a rethinking environment about today's architectural design education with the visual and textual design tools of the past and present; it is a process-oriented alternative studio that looks at architecture through narratives, established to produce speculations about the future, to expose flaws, mistakes, trial and error methods while revealing the invisible qualities. While developing the design process around a story/fiction with narrative, the studio pushes the boundaries of architectural design and establishes creative and triggering relationships between imagination-image and thinking-making. As a way of generating design ideas, narrative acts also constitute a modality of thinking to reproduce them. Narrative is a fragmented structure; each fragment participates in the construction of design thinking through the production and reproduction of events and relationships. The structural, ideational and discursive nature of narrative is fundamental to the production, interpretation and perception of the thought of

architectural design. In the context of Studio Altı | Üstü, all the design fragments, narratives, developed in this process constitute a visual and textual representation of architectural thought through different media such as 3D modelling, animation, collage, comics or a series of orthographic architectural drawings within a story/fiction. Studio Altı | Üstü uses narrative drawing as a dialogue between story and line to embody the unreal/unconstructed/fictional through narrative acts and media. Narrative drawing is an architectural story created through a media, an alternative medium of imagining, describing and realizing indistinct places full of hidden possibilities. This thesis presents a theoretical and practical exploration of narrative acts as a learning and teaching approach in the architectural design studio. It aims to speculate on the future of architectural education with today's design tools and to evaluate the potential of narrative.

Keywords: Design act, Architectural design studio, Narrative drawing, Fragment, Media

ÖZET

Yüksek Lisans

MİMARİ TASARIM STÜDYOSUNDA ANLATI EYLEMİ:

STÜDYO ALTI | ÜSTÜ

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Tarih: Mayıs 2023

Tez, bir tasarım aracı ve nesnesi olan anlatı edimlerinin/eylemlerinin yaratıcı üretme potansiyelini mimari tasarım stüdyoları ile araştırır ve TOBB Ekonomi ve Teknoloji Üniversitesi (ETÜ), Mimarlık Bölümü, Stüdyo Altı | Üstü bağlamında yeniden düşünmeye ve tartışmaya açar. Stüdyo Altı | Üstü geçmişin ve bugünün görsel ve metinsel tasarım araçları ile bugünün mimari tasarım eğitimine dair dejenerasyonlar için bir yeniden düşünme ortamıdır; geleceğe dair spekülasyonlar üretmek, görünmez nitelikleri ortaya çıkarırken kusurları, hataları, deneme yanılma yöntemlerini açığa çıkarmayı amaçlayan, mimarlığa anlatılar aracılığıyla bakan, süreç odaklı alternatif bir tasarım stüdyosudur. Tasarım sürecini anlatı ile bir hikâye/kurgu etrafında geliştirirken mimari tasarımın sınırlarını zorlayarak hayal gücü-imge, düşünme-yapma arasında yaratıcı ve tetikleyici ilişkiler kurar. Anlatı eylemleri, tasarım fikirlerini üretmenin bir yolu ve yeniden üretmek için bir düşünme biçimidir. Anlatı, fragmanlardan oluşan parçalı bir yapıdır; her fragman, olayların ve ilişkilerin üretilmesi ve yeniden üretilmesi yoluyla tasarım düşüncesinin inşasına katılır. Anlatının yapısal, düşünsel ve söylemsel doğası, mimari tasarım düşüncesinin üretiminde, yorumlanmasında ve algılanmasında esastır. Bu süreçte geliştirilen tüm tasarım fragmanları, anlatılar,

Stüdyo Altı | Üstü bağlamında bir hikâye/kurgu üzerinden 3D modelleme, animasyon, kolaj, çizgi roman veya bir dizi ortografik mimari çizim gibi farklı medyalar aracılığıyla mimari düşüncenin görsel ve metinsel temsilini oluşturur. Stüdyo Altı | Üstü, anlatı eylemleri ve medya aracılığıyla gerçek dışı / inşa edilmemiş / kurgusal olanı somutlaştırırken hikaye ve çizgi arasında bir diyalog olarak anlatı çizimini (narrative drawing) kullanır. Anlatı çizimi, herhangi bir medya aracılığıyla oluşturulan mimari bir hikâyedir, gizli olasılıklarla dolu belirsiz yerleri hayal etmek, tanımlamak ve gerçekleştirmek için alternatif bir ortamdır. Tez, Stüdyo Altı | Üstü bağlamında, mimari tasarım stüdyosunda bir öğrenme ve öğretme yaklaşımı olarak anlatı edimlerine/eylemlerine dair, teorik ve pratik bir araştırma sunmaktadır ve bugünün tasarım araçları ile mimarlık eğitiminin geleceğine dair spekülasyonlar/anlatılar üretmeyi ve anlatının potansiyellerine dair bir değerlendirme yapmayı hedeflemektedir.

Anahtar Kelimeler: Tasarım eylemi, Mimari tasarım stüdyosu, Anlatı çizimi, Fragman, Medya

ACKNOWLEDGEMENTS

My deepest gratitude goes out to my thesis supervisors, Prof Dr. T. Nur Çağlar and Asst. Prof. Dr. Selda Bancı, for their most valuable guidance, encouragement, constructive criticism and insights they provided throughout this thesis study. I feel thankful for the privilege of working alongside them and for their aid. I would also like to thank the students of ‘Studio Altı | Üstü’ for their enthusiasm and inspiration.

I would like to thank my thesis committee; Prof. Dr. Şengül Öymen Gür, Assoc. Dr. Serap Durmuş Öztürk, and Asst. Prof. Dr. Sibel Acar for their most helpful comments, precise questions and evaluations. Furthermore, I owe a debt of gratitude to Asst. Prof. Dr. Zelal Çınar and Erald Varaku, for encouraging me to start my master’s degree and for their support during the thesis process.

I also would like to express my gratitude to Kağan Öztoklu for all his support, love and patience during the realization process of my thesis; and to dear Defne Çakır Kırmacı, whom had become my best friend during the study, was always there when I needed her and motivated me.

I am also grateful for my family; Zuhale, Selami and Kerem, whose presence, unlimited support, love and friendship I will always treasure; and for my second family, Grup 2, for their unwavering support.

I dedicate this thesis to the most important person in my life, my mother, who had shown me unconditional love and further motivated me in my studies.



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1. THINKING THE ARCHITECTURAL DESIGN ACT

Broadly speaking, architecture exists to create the physical environment in which people live, but architecture is much more than that; it also acts as a reflection of society throughout history, a portrayal of how one perceives surroundings. In this context, the construction of the architectural environment is closely related with architectural education as the source of architecture. The design studio is at the center of architectural education. “Design studio is the backbone of architecture education” and “[...] is the only place where the activity of architectural design has experimented” (Öztoprak & Çağlar, 2019, p.76). The architectural design studio creates the intellectual and physical context in which the design can reside and develop within. It is the design process and the acts that define the process which has the research potential in the architectural design studio; not the design problem nor the architectural object. As Öztoprak and Çağlar also explained: “The architectural design studio is both the source and product of the environment of architecture in general. It creates the intellectual and physical context in which design takes place and can prosper the practice” (Öztoprak & Çağlar, 2020, p.130).

The process of design studio, which constitutes both the source and product of the design, is formed by the unity of creative acts such as designing, writing, drawing, reading, thinking, making, separating, combining, painting etc.. All of these aid in the formation of the design studio's environment, process, and product.

The studio is a workshop, on the one hand, analogue, and on the other hand, digital productions, models, speeches, presentations, and discussions are made. It is the place to produce, re-discuss and reproduce these, and follow the traces of a more competitive product in every production. The studio is a poetic and fascinating environment where all the work that the student begins to learn from the student from a certain point becomes part of the common experience (Hejduk & Henderson, 1996).

Architectural design education faces fundamental degenerations in view of the changing role of the architecture in the world. The development of technology, epidemics, natural disasters and other political, social and cultural transformations in the world have affected both the production and experience of architectural space.

Hence, the traditional professional and disciplinary boundaries of architecture are blurred, and the basic knowledge that is fed from both inside and outside its boundaries has also changed (Çağlar & Curulli, 2020). In today's degenerated environment, diversifying design studio approaches to expand the discipline's boundaries and capabilities is inevitable. As Çağlar & Curilli emphasizes:

Neither the period of time nor the method of standard architectural education can cover this diversity. Educational institutions can be strengthened by developing a research culture, innovative approaches and learning environments. New and innovative, free and original pedagogies, freed from all the pressures, should be built. (Çağlar & Curulli, 2020, p.xv).

With these transformations, “many traditional approaches, including apprenticeship, and reproduction of existing forms and structures, are left behind; and many novel approaches have emerged, including spatial investigations, using tools and new technology, critical thinking, non-linearity, social and political engagement, interdisciplinarity, participation and questioning the role of architecture” (Aydemir, 2017, p.23)¹. In order to promote learning and social change, several pedagogical practices have to be employed in place of established pedagogical goals and practices which would currently be found ineffective (Froud & Harriss, 2015). In 1960s, a critique of traditional architectural design studio approaches were put forth by Marshall McLuhan, who in his examination describes the transformation required in architectural education as “an attempt to shift education from instruction to discovery; from brainwashing students to brainwashing instructors” (McLuhan et al., 2001, p.100). To respond to the changing needs of both the society and the profession itself, together with his colleagues Schoonjans, (2012) asserts that architectural pedagogy should overstep its boundaries of an object-oriented production of knowledge and aim for a system-oriented perspective and insight. This thought also matches up with the processes and the wide array of elements making up the system, which can be defined as architectural design idea concepts and its representation. In a case study presented in *Reflective Practitioner*, Schön explores a reflective dialogue which takes place between the studio tutor and the learner. In the early stages of the establishment of an architectural design studio, the verbal and visual elements are inseparably linked to

¹ Zeynep Aydemir worked on “Experiments, Practices, and Positions in Architectural Design Studio” in her PhD thesis in 2017. In this study, she presents pedagogical experiments, design studio practices, and discussions on positions related to design education through evaluations, actions, and interviews to explore the trajectory of design education.

one another in this process. He describes drawing and speech as the ‘language of designing’ and links it to a language used in architectural endeavors. As the tutor and the learner follow through the dialogue by using a verbal and visual design language, the learner critiques her design. The tutor then maintains that acts of design may never be linked solely to the intended effects; the materials are in constant communication with the designer and shape future possibilities (Schön, 1983). In Schön’s study, a reflective dialogue between representations and the design process itself can be observed. In another study, Oxman aims to illuminate how designers influence design drawings and identify the necessary knowledge and cognitive facilities employed to put forth a new description for a design (Oxman, 1997, p. 330). Presenting a model for the identification and formalization of re-representation while interacting with the visual medium, Oxman documents processes of adaptation at work in the graphic re-representation of an architectural design assignment. Her study reveals that the manipulation of multiple re-representations are essential for the design process and, arguing that each new adaptation creates an opportunity for further interactions between the elements, the manipulation of multiple re-representations allow for an unplanned diversity and authenticity in design results (Oxman, 1997, p. 346).

With representation gaining importance after the 1960s in the architectural design environment, critical perspectives emerged with Archigram that supported architectural design's practical and pedagogical diversity, such as paper architecture. In this sense, as another approach, Liam Young, referring to paper architecture as one of the critical approaches in the 1960s, defines the Archigram group as speculative architects who emphasise the fiction embodied by the tools of popular culture and narratives and strengthen new ideas about what architecture is without building anything. Speculative architecture² is an alternative approach which engages with society and technology through critical thinking, creating scenarios in order to find a preferable development and to anticipate potential changes in the world. Young explains:

The architect now needs to intervene in these systems beyond shaping physical buildings. And that is really about telling stories about how they operate. Speculative architects mostly create narratives about how new technologies and networks influence space, culture, and community.

² The concept of ‘speculative architecture’ has been addressed and discussed through TOBB ETU Architecture Diploma Studio cases in Defne Çakır Kırmacı's thesis titled ‘Speculative Architecture As a Critical and Creative Act in The Architectural Learning Environment’.

They try to imagine where new forms of agency exist within the cities changed by these new processes (Url-3)

Thereby, Young established the Master's programme in Fiction and Entertainment at the Sci-Arc school of architecture as a platform for studying speculative architecture, which focused on ideas that influence the construction of future worlds. Being an experimental school and a creative design environment, Sci-Arc looks from today's world to the future with technology. Sci-Arc director defines their approaches as: "[...]where others drown in the complex flows of urban life, we thrive and choreograph its movements. We are prophets of beauty, broadcasters of ideas, and tellers of stories. We are builders, leaders, and dreamers" (Url-4).

In contemporary architectural design learning and practice, a diverse range of themes and approaches are employed for reorganising the setting. Instead of the limited interaction and materiality of the built product of architecture and user habits, these design approaches emerge through actions extending from the part to the whole in a complex network of relationships. In this sense, the narrative is considered as a design approach. *Narrative architecture*³ constructs a space beyond reality, unbounded by historical and social context (Psarra, 2009, p. 81). This unboundedness encourages the subjective and personal involvement of the designer. Furthermore, the narrative is an "additive feature" in architectural space in-between "non-rhetorical architecture" and "adds meaning to architecture" (Rakatansky, 1992, pp. 198-221). Every architectural design studio seeks for new situations and encounters through productions based on concepts; essential learning and experiencing activities such as designing, researching, producing, representing and interpreting. Hence, each studio creates its own identity, levels of encounter and approaches to design and tools, which ultimately shape its practices. Narrative, as one of these approaches, creates different encounters within the architectural design studio; these encounters refer to the conditions via which the architect focuses on the architectural object, thought and imagination, both before and during the design process. Through the narrative and these conditions, the awareness and creative energy of the architect is intensified. For example, in the architectural design studio, painting, music, cinema, theatre or

³ Narrative architecture has begun to be theorised as an explicit mode of architecture by Sophia Psarra in *Architecture and Narrative: The Formation of Space and Cultural Meaning in Buildings* (Routledge, 2009), and by Nigel Coates in *Narrative Architecture* (London: Wiley-Academy, 2012).

literature can be considered as different levels of encounter with narrative. The narrative is the surface energy feeding the depths of the design process; unsatisfied with what is visible, it finds and extracts the invisible, brings the material and the immaterial together, aids in the construction of the design process, making it efficient and help it obtain desired intellectual outputs, and harbours the happiness and excitement of this formation. In this context, the design studio is motivated through narrative and narrative acts⁴ and helps develop strong learning communities. This motivation helps deepen learning and long-term retention of design study learning outcomes. In the following chapters, tenets of narrative as an alternative design approach, is explained through Studio Altı | Üstü.

1.1. Re-organisation of the Design Studio

This thesis presents an architectural design approach through Studio Altı | Üstü, which was established as the sixth studio of TOBB University of Economics and Technology⁵, and developed an experimental and discursive approach to architectural design, different from the other five architectural design studios that employ similar practices in the discussion, development and representation of knowledge.

The studio is named as “Studio Altı | Üstü” which is based on a wordplay in Turkish. Bancı explains that as follows:

Studio refers to architectural design studio. Altı means six in numbers, yet it also refers to the bottom: the lowest part of something. Üstü means the upper surface of something. “Altı üstü” is also an expression used to emphasize the insignificance of the work done. There is also a vertical line, called the think colon (|). It is a symbol commonly used in mathematics, programming, computer science and other fields. Depending on its context, its use and meaning change. Here, the think colon is a threshold that unites or separates the lower and upper parts; it is an interfacing of two parts that create each other or it's like two sides of the same thing. So we would argue that the think colon connotes architectural thinking and this is where the architectural design studio indwells (Bancı, 2022).

The design studios in the TOBB ETU architecture department are organised as vertical studios; where students are equipped with different skillsets. Studio Altı |

⁴ In this thesis, the narrative act refers to all design acts such as reading, writing, drawing, thinking, representing and more.

⁵ Each academic year at TOBB ETU consists of three terms of three months. Therefore, in this study, a study was conducted over six terms, which are called trimesters.

Üstü was established as the last of these studios. The other five architecture studios' subjects are international or national competitions, current problems, or a series of cases regarding the development of architectural knowledge. While the other studios focus on a 'topic' or 'case', Studio Altı | Üstü aims to hold a variety of discussions on meta-topics and provides an agent for discussions. As Rollo May states, “now we must make the above distinction clear if our inquiries into creativity are to get below the surface” (May, 1995, p.28). Based on this idea, Studio Altı | Üstü aims to break apart from the surface and reveal the energy of the invisible behind the visible; to reweave the energy in the space between the lower part and the upper part with different approaches. Nur Çağlar, the founder of Studio Altı | Üstü, explains this as follows:

A few years ago, while observing that the energy of our studio practices was gradually decreasing, that the brightness of the process was gradually fading, and that a light breeze would be enough to rekindle it, I realised that I was in search of sparks that would raise this energy. This search was more of a way to transfer a joyful, enthusiastic, entrepreneurial life energy to the studio. This may be partly due to the linear progression of everyday life, confined by the usual boundaries of time and space. A material and simple life... On this surface are a prominent studio, and it is now ordinary practices... The visible top of the studio... Superficial, without depth... However, isn't there also the underside of this studio? If we went down to those golden depths, could we open the doors to an alternative life where we would be free from the siege of time and space, where more vibrant, energetic and deeper boundaries would melt and disappear? Matterless, ruleless, unconditional, subjective, emotion-laden... It will loosen and even break our ties with material life and its realities...

We have been working for six periods, digging and digging, encountering an energy source that diversifies and enriches as it deepens, an abstract life without borders... As it gets deeper, it gets further and further away from the practices and goals of everyday life; as it gets deeper and deeper, it gets further and further away from the realities of material life and seeks and works to establish its reality, its relations with the life on the surface gradually weaken, but its curiosity and enthusiasm for deepening gradually increase; its energy increases while working to achieve this goal like a generator...

Deepening brings with it the realisation of the infinity of resources, and with that awareness, it begins to come into contact with elements such as art, literature and philosophy. Some of our actions are visible and related to life on the surface, such as walking, looking, and talking. Some are deeper, such as thinking, seeing, and imagining. They integrate with our senses. Emotions may not be directly visible, but they intersect with visible acts and are reflected in them. Thus they multiply within each other, deepen each other and make each other meaningful. Our superficial and deeper life and actions are not opposed to each other; in fact,

they complement, strengthen and nourish each other and take place within each other. Therefore, design has both superficial and deep realities. The deeper we can go, the more we develop the superficial. The energy of the 'Alt' also revitalises the 'Üst' (Çağlar, 2022).

Although the experimental nature of the architectural design studio has been widely discussed before, the main focus of this discussion has been on the architectural production itself. However, Studio Altı | Üstü's approach focuses not only on the architectural object but also on the research and design process of the design studio. In this process and in revealing the invisible, exposing flaws and mistakes, trial and error are considered essential. Therefore, the studio has many other actual and intellectual outputs and discoveries.

Studio Altı | Üstü is an empirical studio, and in the design process, all the participants of the studio (studio tutors, students, assistants, visiting professors, jury members)⁶ design their own process; the studio process can be defined as a play by Huizinga's definition. According to Huizinga, play is superfluous; play can be deferred or suspended at any time; play is never a task; in fact, freedom, play is not 'ordinary' or 'real' life. It is rather a stepping out of 'real' life into a temporary sphere of activity with a disposition all of its own, and play can be repeated at any time (Huizinga, 1944, pp. 8-11). Therefore, within the bounds of their imagination, all participants in the studio play a role as the narrators, writers and actors of this play; the student questions all kinds of things that are yet to be realized in current architectural practices with the question "What if?", and can design them with a creative set of acts in Studio Altı | Üstü environment. This question frees creativity from all known limitations and directs it towards 'pure creativity'. Studio Altı | Üstü is an experimental design studio and can be considered a play as a cooperation studio. Here, the development of the students, tutors and meta-theme occur through the interaction of these components and changes each term. In Studio Altı | Üstü, design research does not proceed through a question; the presence of all participants in the same environment produces different approaches and questions. Thus, this interaction adds value to the design process and makes the experience more varied and valuable each term.

⁶ Studio Altı | Üstü's learning process is redesigned each term with different students, tutors, assistants, jury members and visiting professors. Although the tutors usually conduct the design process through several groups, the process is sometimes carried out as a group activity and results in different approaches. The workshops and seminars given by distinct architects, designers or artists are the most crucial components of the experimental design process.

Architecture begins not with the building but with design, hence with various representations of the building. Studio Altı | Üstü acknowledges architecture not as a practice of producing images but as a practice that carries out the production through imagination. In this regard, Studio Altı | Üstü is not a medium where architectural projects are produced but where architectural thought is created and visualised; in a sense, the design in Studio Altı | Üstü is a communication medium between architecture and the world. This communication takes place through words and images. As Mitchell mentions in picture theory, words and pictures are equal and cannot be separated. “There are no ‘purely’ visual or verbal arts, though the impulse to purify media is one of the central utopian gestures of modernism” (Mitchell, 1995, p.5). As one of the primary agents of Studio Altı | Üstü, the line forms the basis of the media. With the developing technology and media usage, visualisation media that go beyond the line are formed in today's world. Animations, illustrations, gifs and more enable the creation of trailers and constitute the production environment of the studio. In addition, aphorisms as a textual communication and designing tool of Studio Altı | Üstü are the product of a comprehensive reading and research. It contributes to the student's versatility.

In a world where architectural education and design are degenerating, technology is evolving, and generations are changing, Studio Altı | Üstü creates a medium which allows rethinking architectural education through a process of rethinking and regenerating the changing world and the future. Degenerations, in the context of architecture and architectural education, are corruptions in the world which can be caused by factors such as an epidemic, war, a rapidly developing world, or a political and social situation. As a result of profound thought and research on Studio Altı | Üstü in the context of education, a re-establishment, definition, and production in the COVID-19 pandemic process where all social rules, educational environment and perhaps all living spaces have changed, the approach was reborn as a regeneration initiative. With the impact of changing educational environments, tools and students, new tools and forms of representation were required. Studio Altı | Üstü aimed to fulfill these requirements and develop a re-learning approach and practice. In this sense, Radical Pedagogies⁷, which explores a series of pedagogical experiments constitutes

⁷ Radical Pedagogy is an ongoing multi-year collaborative research project by a team of PhD candidates in the School of Architecture at Princeton University, led by Beatriz Colomina and involving seminars,

a reference for Studio Altı | Üstü. As a challenge to normative thinking, Radical Pedagogies questioned, redefined, and reshaped the post-war field of architecture. By questioning the basis of architecture, they introduced new and untested practices rather than reinforcing and disseminating existing forms of learning.

In a similar manner, Studio Altı | Üstü argues that architectural education requires to be structured in an open-ended, diverse way that allows students to freely choose and develop their architectural practice. The studio has an undefined theme, method and/or content; it changes and transforms along the way; hence, is an experimental design studio. Benefitting from different environments and disciplines, the studio gathers all forms of art such as poetry, sculpture, painting, music, cinema, graphic arts etc., within itself and therefore is paradisciplinary. The learning process and approaches in Studio Altı | Üstü can be seen as an example of the ‘open city’⁸, as it is about the experience. In the open city practice, 'poetic acts'⁹, which allow for intuitive, mental, and operational production, create and convey the experience. While design thinking is produced through different actions, original ideas are formed by combining the knowledge learned along the way with intuition. Poetic acts emerge as a result of these interactions and create the knowledge of unlimited and incomplete design by reconstructing, reinterpreting, and producing the existing (Aksu & Çağlar & Küçük, 2011; Çağlar & Aksu, 2011; Çağlar, 2019).

interviews and guest lectures by protagonists and scholars. The project explores a remarkable set of pedagogical experiments of the 1960s and '70s that revolutionised thinking in the discipline. Each student is working on one of these experiments and collectively mapping the interconnections and effects of these experiments towards a major publication and exhibition (Url-1)

⁸ The Institute of Architecture of Valparaíso in Chile, founded in 1952, led and founded by Alberto Cruz, an architect, and Godofredo Iommi, a poet, is an experimental laboratory in architectural thinking and pedagogy. Their methodology emphasized process and making rather than the result. In other words, practice and research were of the highest importance, obliterating architecture as a commodified product and placing intuition, improvisation, and experimentation at the forefront. The Institute of Architecture of Valparaíso's pedagogic program was based on drifts (*travesías*), acts (*phalènes*), and utopian architecture. The institute needed a physical place to conduct an essential part of its activities. After twelve years of existence, the school found a location, the Open City, in an open-air site to develop in physical form their experiments, constituting a sort of research lab and workshop. The open city allows students to be afforded the opportunity of learning while making, and hence inevitably involves learning through error (Url-2).

⁹ The poetic act can be defined as a kind of design method in the open city. Poetry recitations, drifts, and *phalènes*, defined as poetic actions in the pedagogical approach of the Open city, were researched and reinterpreted by Nigel Cross years later and defined as ways of creative learning process under the name of Design Thinking. In this context, the poetic act is an expression of learning by trial and error and the act of free and experiential design (Cross, 2011).

As a pedagogical act in the Open city, reciting poetry is used as a guide at the beginning of each study; The process that started in this way continues in an improvised manner by students and tutors; architectural spaces are reproduced through trial and error. Throughout the process, narrative acts as a practice, similar to reciting poetry, as a way for Studio Altı | Üstü to enhance the experiential process. The structural components of the narrative are fragments. The fact that the fragments are textual, incomplete, open-ended, repetitive, sequential, and complex creates diversity in the creation of architectural design thinking. Becoming or metamorphosis of architectural design is developed by design fragments, which address a moment of transformation within the design process (Çağlar & Öztoprak, 2020). The fragments not only create a whole, but also enhance each other. Each new fragment is developed with the experience and knowledge gained from the development of another fragment. In this way, the fragment transforms itself, the studio medium, the professional structure of the students and tutors, and the architectural design (Çağlar & Öztoprak, 2020). With this transformation, “the design fragments are reversed, rejected, dismantled, combined with new fragments and reconstructed over and over again” (Çağlar & Öztoprak, 2020, p.130). Despite the diverse nature of the fragments, the communications are often seamless, creating an open-source interaction system. Çağlar and Öztoprak states the following: “In this sense, the architectural design process can be understood as a rhizomatic structure with its non-hierarchical nature in which any node (fragment) can be connected to any node (fragment)” (Çağlar & Öztoprak, 2020, p.130).

Architectural design is both the source and the object of design research. The architectural design comes into being through the act of giving form to the imagination. This emerges primarily through representation. The design idea is a dynamic process that responds to changing situations; it transforms according to the design object and the represented image in the design process. Using the potential of a line, Studio Altı | Üstü explores new approaches to the search of design thought while changing the story into an illustration through textual discourse, aphorism, or a line and produces drawings in various media.

The line is not only a sign on the paper but a narrative act that initiates and transforms architectural design; it has the potential to unite, separate and recreate. The

line does not exist in a single dimension, it can evolve into different dimensions and can be found in various media such as drawing, film, installation or 3D modelling. Studio Altı | Üstü sees the line as one of the narrative acts; as the main action of architectural design and with a narrative approach, reinterprets all studio works produced with narrative acts initiated by the line. The studio defines this approach as a bridge between imagination and image, narrative drawing as a tool for architectural design. Grennan used the term narrative drawing to propose an identity for interrelated features and, in making this proposal, to identify, define and prove the salience of these relationships (Grennan, 2017). Studio Altı | Üstü acknowledges narrative drawing as such that can be defined as linking the usage of media and correlated concepts for architecture; it interprets, discusses, and identifies these narrative relations. In this sense, narrative drawing is the reordering of something or a story; an act which turns telling a story into an another endeavour. Thus, it differs from storytelling. Within narrative drawing, “the same story may exist in many different versions and, indeed, in many different modes and media” (Smith, 1980, p.214). This enables narrative drawing to support different media uses in architecture education. Narrative drawing reveals the relationship between thinking and doing, form and content, representation and meaning, discourse and story, and idea and object. It represents knowledge reproduced throughout the design process. Hence, it has significant potential since it enables the evaluation of the process, not the product.

Studio Altı | Üstü explores narrative thinking as a design thinking approach, a creative and collaborative inquiry process. This encourages an iterative approach to research, production, interpretation, representation and critical review. In Studio Altı | Üstü, narrative drawing as an alternate design tool and studio practice, establishes new conceptual and physical relationships through various media. Within the context of studio experience, a variety of design media significantly support and enhance students’ insights and designs. Schön has described this multimedia design process “as a reflective conversation with the materials of a design situation” (Schön, 1983). In light of all these, this thesis is a rethinking process of the creative design acts in the architectural design studio employing narrative as a design tool. Also, it conceptually researches the relationships between narrative and architectural studio practice, reinterpreting them in a practical sense with narrative drawings produced in Studio Altı | Üstü.

1.2. Scope and Aim

This thesis concerns how Studio Altı | Üstü, an architectural design studio, speculates on the world through a rich palette of narrative acts. It proposes a theoretical approach to narrative acts and explains them through the experience of Studio Altı | Üstü. Within the scope of the thesis, Studio Altı | Üstü can be described as a research environment aimed at understanding narrative through media, how different media evoke a narrative structure and the difference in the type and form of narrative pertaining thereto. At this point, this thesis explores and researches narratives, an alternative design tool (narrative drawing), and objects in the Studio Altı | Üstü environment as dynamic and experimental studio practices which transfer, develop and transform each experience. Through the drawing, the studio developed a method and approach to an architectural design based on narrative and representative images – from the two-dimensional explorations of the drawing to the three-dimensional realization of objects and their arrangement. Studio Altı | Üstü, (i) emphasizes the significant correlations between imagination, stories, and language, (ii) stimulates creative thinking on contemporary topics and architecture, (iii) focuses on fiction as a method for discussing the current problems of architecture, the city, and the world, (iv) develops the present critical view through design, and (v) believes that architects can establish different 'structures' as well as constructs (Çağlar et al., 2020). Studio Altı | Üstü expects students to develop a critique of the built environment within the freedom provided by the studio, which is organised by its own rules, and to discover and reveal its existing potential. First, it observes how students create their fiction as a response to a triggering theme. Students are expected to textually and visually explore alternative meanings of the fiction textually and develop new narratives. Secondly, alternative ways of thinking, seeing, and designing are encouraged by the use of the line. By developing iterative representations using narrative and narrative drawing, along with multimedia use, students are required to push the boundaries of representation and reinterpretation, which supports a fragmented way of creation. In this context, narrative drawing is described as the potential to reproduce, reinterpret, research, and represent architectural ideas to generate and express architectural thought. In light of all this, the objective of this thesis is as follows:

1. To discuss the potential of narrative act's flexible and interpretable nature to generate idea(s) in architectural design studios through narratives as an alternative design method.
2. To define a theoretical framework for the alternative teaching and learning practices created by Studio Altı | Üstü through the use of narrative in the traditional architectural education environment, with the inclusion of correlated concepts such as research, reproduction, reinterpretation, and representation.
3. To understand and interpret how the representation of architecture with aphorism | association | media | fragment | story can contribute to creativity and design diversity in architectural education.

1.3. Methodology and Organization

In this thesis, a new approach to architectural education has been developed with narrative acts. These acts include drawing, researching, producing, interpreting, reading, writing, modelling, representing and more. With the Studio Altı | Üstü cases investigated in this thesis, the creative and transformative effects of narrative acts on the design process were explained, and the design process was analyzed with repetitive correlated concepts. These concepts are then discussed with process analysis diagrams, which highlight the architectural design process through the relationship between the act and the media. To provide comments on the student's process in the studio, there needs to be more than the fragments produced as each fragment represents the product. Process analysis diagrams, on the other hand, are sections taken from student's experiences in the studio; they constitute a subjective representation of the narrative and the design process which represent the unrestrained, open-ended and process-oriented nature of the studio. In this context, the primary purpose of the selected studio cases is to demonstrate diversity, multiple uses and change in the process. In addition, all studio works are presented in the relevant chapter in the appendix. The study's methodology is twofold: theoretical research to address the narrative and its conceptual framework, and utilising the case study strategy to obtain an in-depth evaluation of the project's potential and implications in the architectural design studio. Therefore, the

study consists of four main chapters: the first chapter, 'Thinking the Architectural Design Act, the second chapter, 'Narrative Act As A Design Tool', the third chapter, 'Re-thinking Narration on The Architectural Design Studio' and the fourth chapter, the Conclusion.

At the beginning of this thesis, the narrative is defined as an alternative design approach in architectural design studio practice, a mental and physical fiction or image produced by the interpreter/student. The structural and literary aspects of narrative (fragments and aphorisms) and the experimental and discursive role of multimedia relations are examined in Studio Altı | Üstü, an architectural studio at TOBB ETU. The second chapter aims to define the narrative act and thinking, drawing and discourse, which are defined as the main actions, are explained with the fragmental structure of the narrative act. This chapter presents the line's journey with the 'narrative drawing' it creates and the narrative acts. Since narrative drawing is a narrative design tool, the relationship between narrative and line is explained and redefined through the line and drawing as a visual expression/representation in the studio context. This chapter discusses that architectural drawing is the primary architectural production in which meaning can be created and placed. The potential of architectural drawing to convey a story is reinterpreted through design studios, architecture groups and contemporary architectural narrative works. In the third chapter of the thesis, Studio Altı | Üstü and the role of narrative in the design studio are re-examined through correlated concepts. In the next chapter, the diversity created in the studio by the correlated concepts mentioned in the third chapter is exemplified by Studio Altı | Üstü productions. Finally, process analysis diagrams were created and discussed in the discussion (conclusion) chapter to provide a better understanding of these examples and to interpret Studio Altı | Üstü's process-oriented design approach

2. NARRATIVE ACT AS A DESIGN TOOL

2.1. Narrative Act in Architecture

Although the terms ‘narrative’ and ‘architecture’ may not seem like related concepts at first glance, they both carry the equivalent of their primary act. Architecture is, first and foremost, an act of mental construction. Narrative carries out this mental construction process with various acts. As an organizing image, architecture and narrative share a common ground in the act of ‘world-making’ (Sharr, 2012).

Both are artisans who guide the viewer’s and listener’s imagination into another realm. The storyteller’s architecture is primarily language. The architect’s primary storytelling medium is drawing. Through drawing, an architect guides the viewer’s imagination into another not-yet-real world that is projected much like divinatory practices of reading palms or tarot cards. When architects are no longer present to tell their story, we must rely on reading the clues from the making of their drawings (Emmons et al., 2018).

“Narrative enters architecture in many ways, from the conceptual ‘messages’ it has made to stand for the illustration of a design through models, drawings, and other representational forms” (Psarra, 2009, p.2). Narrative has many aspects akin to architecture. Narrative is a structure composed of fragments. Each fragment participates in the construction of design thinking through the re-production of events and relationships. In this context, a narrative is defined as “a structure, a particular way of combining parts to make a whole or as the process or ‘the activity of selecting, arranging, and rendering story material in order to achieve specific timebound effects on a perceiver” (Bordwell, 1985, p.xi). Narrative is also a way of thinking about producing and reproducing design ideas, and it can therefore be defined as an architectural practice. This re-production brings different ideas and encounters, creating a base for the architectural discourse. Therefore, discourse, which represents design ideas and transferability, is an indisputable part of the narrative

These characteristics, which allow for the narrative and architecture to meet on a common ground (as it is a way of thinking and a statement; the narrative is structural), reveal countless implicit acts. A series of acts that bring the narrative to realization can be defined as narrative acts in the architectural design studio, which is the source of architecture. These actions include thinking, imagining, educating, designing, reproducing, researching, drawing and more. Narrative acts are the acts which create, develop, and represent design thinking to understand, develop, and explain architecture (Figure 2.1). In the architectural design studio, narrative acts function as a design tool that produces architectural images. While the repetitiveness and non-limitation of the actions create an unrestricted learning and design environment in the studio, it also increases diversity by making the design environment dynamic with countless act combinations. In light of all these, this thesis argues that the narrative's structural, conceptual and discursive nature is essential in architectural design's production, interpretation and perception through narrative acts and defines an alternative design tool through drawing, one of the narrative acts in the architectural design studio.



Figure 2.1 Narrative act in architecture. (prepared by the author)

2.2. Definition of The Narrative Act

Narrative is a structural, intellectual and discursive concept (Figure 2.2). Reading, writing, drawing, interpreting, researching, representing, modelling, painting, and many other actions fall within the boundaries of narrative acts. As the

general definition of such implies, thinking, drawing, and discourse are seen as influential in for architectural design thought. These acts allow the creation and development of design thinking in the design studio. While defining the narrative act, the acts' dynamic, open-ended and incomplete nature creates fragmentation. Fragments bring a process-oriented learning/teaching experience in the architectural design studio. It creates the journey of the line, the physical equivalent of thinking in architecture. Thus, narrative acts constitute an alternative design tool that employs multi-media through the line. This tool is defined as narrative drawing. Narrative drawings have been expressed in several ways by different architects, groups and architectural design studios from past to present. In this chapter, while searching for a definition of the act of narrative as a design tool, its character is defined through thinking, drawing, discourse and fragmentation; and the equivalents of the design tool (narrative drawings) in the physical environment are presented as contemporary practices.



Figure 2.2 Narrative in architecture. (prepared by the author)

2.2.1. Thinking

Thinking is not innate but must be engendered in thought. ... The problem is not to direct or methodologically apply a thought which preexists in principle and in nature, but to bring into being that which does not yet exist (there is no other work, all the rest is arbitrary, mere decoration). To think is to create - there is no other creation - but to create is first of all to engender 'thinking' in thought (Deleuze, 1995, p.147).

Thinking can be defined as the simplest narrative act. The act of thinking is the basis of designing and imagining. Architecture constructs architectural design thought via thinking and imagining. As Bono states, the production of thought can be defined as ‘mind work’ (Bono, 1970). The purpose of thinking is to collect information and make the most significant use of it. Mind work takes place through different ways of thinking such as vertical and lateral thinking, which are often compared to each other, and produces architectural thought. The mind cannot make the most use of new knowledge unless it has a way to rebuild and update the existing patterns and would otherwise be confined to fixed idea patterns. The traditional methods of thinking, such as vertical thinking, demonstrate a way to refine such patterns and establish their validity. However, information cannot be used optimally without transforming the thinking pattern at hand. As Bono explains: “Vertical thinking is concerned with proving or developing concept patterns. Lateral thinking is concerned with restructuring such patterns (insight) and provoking new ones (creativity). Lateral and vertical thinking are complementary” (Bono, 2016, p.9).

The mind characteristically processes information, but it has limitations. It generates the concept patterns but cannot regenerate them to bring them up to date. Lateral thinking emerges from these inherent limitations. As Bono said, “Lateral thinking is closely related to creativity. But whereas creativity is too often only the description of a result, lateral thinking is the description of a process” (Bono, 2016, p.7). Lateral thinking is akin to reproduction. It expands the one-way vertical thought to different directions by reproducing it in different patterns. In this context, the production of architectural thought involves multilayered thinking. Rather than a singular way of thinking, architectural thought develops through many relations between its components. These relations occur via a combination of vertical and lateral thinking. Holl defines the act of structuring architectural thought, along with all these different ways of thinking, as follows:

A structuring thought requires continuous adjustment in the design process to set manifold relations among parts within the larger whole. As dimensions of perception and experience unfold in the design process, constant adjustments aim at a balance of idea and phenomena (Holl, 1993, p.22).

In this context, Holl (1993) explains the creation of architectural thought as a unifying force of architectural design which creates multifaceted relationships between

concepts. According to him, architectural thought does not seek the ideal or the universal; it is relative and subjective, so architecture can be defined as an open-ended medium (Holl, 1993). Thought processes can be structured spatially and intellectually through such activities as architectural experience, re-reading, destruction (criticism), reproduction (interpretation) of thought, and narrative, as a presumed feature of relativism and subjectivity. Narrative is an existential phenomenon that includes storytelling, which is the deepest of thinking practices. Each story arises from thinking as “the configuration of time in the narrative and its reconfiguration by the narrative” (Ricoeur, 1984, p.4). In this context, the narrative act constantly (re)constructs architectural thought. The creation of architectural thought is “the idea of a simulation, reproduction, enhancement, or augmentation of the senses and materiality” (Grosz, 2001, p.85). “Narrative thinking is a design attitude. It supplements the ‘traditional’ design process by enabling designers to imagine different perspectives” (De Bleekere & Gerards, 2017, p.309). Narrative thinking encourages a critical, empathic, and democratic attitude, which is crucial for an architectural design studio. It can be considered as a process of collaborative design thinking: a process of joint inquiry and imagination in which diverse actors jointly explore and define a problem and develop and evaluate more daring and less predictable solutions. It is a process in which all participants can express and share their experiences, discuss and negotiate their roles and interests, and realize positive change. With narrative thinking, thinking becomes a practice of imagining and architecture reevaluates imagination as a creative power. Architectural design thought is not a direct story or a sequence of events but a narrative; it positions conceptual components, perceptual experience, and reorganization of design ideas as potential tools for representation. More than a way of thinking, narrative can become a poetic and interpretive approach that is productively related to architectural learning and experiences and cultivates the imagination about spatial thinking. Hence, together with the act of thinking, which is mind work, the act of drawing, which is a poetic and interpretive approach and physically constructs the architectural design thought, can be perceived on the same plane.

2.2.2. Drawing

Through architectural drawings of a certain kind, stories can also be told
(Cook, 2014, p.132).

The line is a concrete, spatial, and temporal component of architecture and an essential tool for visual expression. It is a drawing and thinking tool that initiates, transforms, unites, and separates architecture. Each line drawn displays the architect's knowledge, mentality, and the communication between seeing and thinking, allowing new relationships to be established in addition to existing ones. Line give the act of making the potential to open new vistas along with thought and visual compositions. In this context, the line can be conceptually associated with the actions of 'designing' and 'dreaming'. The line is a visual expression and clarification of the concept one has in the intellect and that one imagines in mind and builds up in the idea. Each line come together to form a drawing, that is, a narrative. The narrative collects the line's entire energy. Each line is therefore a fragment of a narrative, and the narrative are the line itself. Drawing is both a cognitive activity and a dialectical tool for thinking, creating ideas, and learning new principles from thoughts. Throughout the architectural design process, the drawing remains inherently a product of both the hand and the mind- an intuitive response from the designer that may encompass the scheme's key concepts, histories, and spatial qualities. The drawing can be read as a tangible summary of the designer's thoughts, whether it represents an image or a place. According to Pallasmaa, drawing produces three types of images: the image drawn on a piece of paper, the image recorded within the brain, and the physical memory of marking the paper. The images are not static snapshots of the scene but rather a continuum of ongoing perception and correction, beginning with the first glimpse of the topic and ending with the closing of the sketchbook. The final product compresses and compiles the entire duration into a single image (Pallasmaa, 2009). Drawing is a space of freedom where one can construct transiently unbound by the limitations of a predetermined result. It is contingent, physical, and intuitive; it is a daily ritual, a method for self-healing, or a tool for revolutionary action. Drawing is a platform for contemplation, a place for invention and speculation, and a realm of fiction. Drawing, as a tool that tells a story and creates an atmosphere, mediates perception and reflection, has a constitutive role in the production and communication of knowledge. Narrative through drawing intensifies the creative process, revealing hidden connections

between physical-mental performance. The act of drawing is the essential starting point for the conceptual process of design. It is a visual expression tool which intertwines observations of the environment, subjective perception, and imagined architectural intervention. However, drawing is more than just a reflection or representation of design thinking; it is the thought itself (Figure 2.3). Goldschmidt, who works on visual design thinking, also states that drawing is not just a reflection of visual thinking; it is visual thinking (Goldschmidt, 1994).

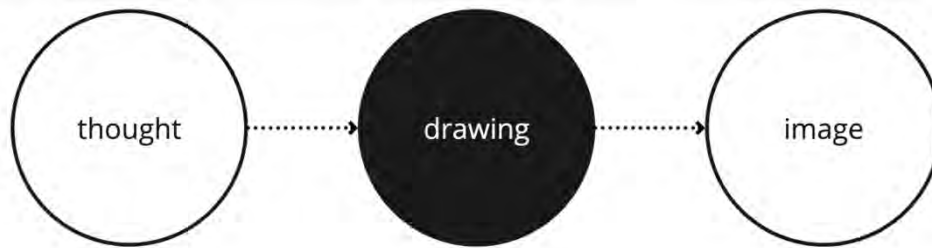


Figure 2.3 Drawing as a medium between thought and image. (prepared by the author)

Moreover, Goldschmidt states that (2003, p. 78) there are only vague and crude ideas in the mind when drawing begins. As the draft progresses, new associations are created, and cues are extracted from these associations in the early stages of the design process. To obtain design cues, it is necessary to capture the ideas produced in succession on paper. Regarding Bono's theory of lateral and vertical thinking, this process can be described as lateral and vertical transformations. In lateral transformation, movement develops from one idea to a slightly different one; the movement in a vertical transformation is from an idea to a more detailed and rigorous version of the same idea (Rodgers et al., 2000, p. 453). In other words, the expression of the design idea through drawing, learning the clues of the design information through drawing, is carried out with both lateral and vertical transformations. Lateral transformations enable the transition from one idea to another; vertical transformations allow elaborating on the same idea. A similar transformation is examined in this thesis. In studio practice, horizontal and vertical transformations consist of how the draft prepared by the studio tutor can be transformed by the architecture student and the visualization of a holistic final product seated upon consistent relationships. As a result, drawing helps freeform and develop a concept that mediates between imagination and the embodiment of ideas; it teaches abstract and artificial thinking, reveals the essence and structure of the form, and activates a deeper level of perception

beyond ordinary visual observation. The architecture design process with line allows finding clues and establishing new relationships based on the level of perception of formal images. The journey of the line as these relationships are established is multi-layered and endless. The line builds the process with fragments in the architectural design studio. Production is progressive; it evolves and develops through different narrative acts.

2.2.3. Fragmentation

“Fragment, in literature, a composition which the author had not the skill to finish”
(Bierce, 1995).

The evaluation of fragments and fragmentation and their philosophical, conceptual, and formal expressions can be traced back to early German Romanticism (Sandford, 2016, pp. 25-35). The idea of the fragment is deeply tied to the origins of archaeology, architecture, and culture. Thus, in the cultural and conceptual context of the concept of the fragment “as an artistic solution to a philosophical problem”, the idea of fragments spread rapidly from concepts applied in literature and art to all other fields (Osborne, 2013, p. 58). In the history of critical discourse on the fragment, it is not defined as an object concerning the period in which it appears or the concepts of aesthetics/genre. Hence, historians and theorists may refer to fragments as ‘Ancient,’ ‘Romantic,’ ‘Modern,’ ‘Postmodern,’ ‘Philosophical,’ or ‘Literary.’ These labels do not make a clear distinction between the formal features of the piece in terms of form/content duality (Elias, 2005, p.4). The fragment has no stable position in time or space, no beginning and end. It has only becoming; unless the fragment is defined in relation to its integrity, no explanation of the fragment’s history is possible. In this context, the fragment is a self-influencing thought. As a structural component of



Figure 2.4 The Fragments of Narrative/ Narrative is a structure. (prepared by the author)

narrative, fragment has many characters / *personae*¹⁰ which is textual, incomplete and open-ended, repetitive, sequential and complex.

Dreams were analyzed as language as well as through language. Language was called the 'the main street of the unconscious'. Generally speaking, it appeared as a series of fragments. So too with architecture when equated with language. It can only be read as a series of fragments which make up an architectural reality. Fragments of architecture are all one actually sees. These fragments are like beginnings without ends. There is always a split between fragments which are real and fragments which are virtual, between experience and concept, memory, and fantasy (Tschumi, 1996, p. 94).

As Tschumi mentioned, architecture, language and text are concepts which correlate as a series of fragments. In this context, the fragment is a textual opening for a potential act of narrative. In other words, it is "a very 'clear' aphorism that states its own content as ambiguous" (Elias, 2005). It brings on a collision with itself and is dominated by imagination. In this context, the fragment is an aphorism, yet not a recollection of quotes. In the words of Elias: "Dreams are condensed escapes, which encounter and reflect language in its condensed assertive mode: the aphorism. The aphorism is the action that the dream gets caught in" (Elias, 2007, p.103). The aphorism, as a textual fragment and a concise statement, describes a narrative. When these fragments are combined, they can form a whole, a new matrix, new meanings, and perception forms emerge but they can also have various expressions when they are separated. "Narrative – the re-telling of (elements of) the story or possible stories – is a way in which a number of the participants appear to gain control over meaning and interpretation" (Green et al., 2016, p.355). Hence, the directly transmitted textual expression is open to reinterpretation and various meanings. Textual fragments that build a story illustrate how the aphorisms function as the matrix of interpretation in a narrative that always finds itself, first, in a state of conclusion and then in a state of foregrounding complementarities. In this way, the aphorism functions as a narrative device; a way to make sense of the world.

The concept of fragments and fragmentation "conceptualizes the idea of incompleteness as the essential potentiality of form, imagination, and contingency,

¹⁰ Gilles Deleuze and Félix Guattari, in their book *What is Philosophy?* defined the concept of *conceptual personae* as subjective presuppositions that map a plane of immanence. The conceptual persona is the tool invented to create new concepts with which to bring forth new events.

where the fragment is determinate, projected, and a conscious intention to leave things, concepts and forms open to new interpretations and readings” (Mojsilović & Milenković, 2018, p.518). Although the concept of fragment essentially represents being unfinished and incomplete, it can be defined as a well-rounded, self-sufficient form. As Schlegel pointed out: “The fragment in its full sense is the idea of something complete in itself and yet essentially incomplete” (Schlegel, 1991, p. 45). The fragment, complete in its incompleteness, represents the multiplicity of possibilities. As Lacoue-Labarthe & Nancy stated, “each fragment stands for itself, as well as for the whole from which it is detached” (Lacoue-Labarthe & Nancy, 1988, p. 44). The fragment exists both in the whole and in each part at the same time; it can therefore be interpreted as the primary component of each whole. A fragment is not just a broken component; it carries all the information of the whole within itself (1988, p. 63). In other words, “the piece is essentially defined in terms of its natural and immanent multiplicity - it is always formed and never completed” (Mojsilović & Milenković, 2018, p.519). According to the fragment ideas of Nietzsche, Heidegger, Bataille, Blanchot, Barthes, Deleuze and Nancy, the fragment can be viewed as a continuous state of becoming something broken and formless, separate from the whole and its components (Mellamphy, 1998). However, it can also represent an incompleteness which tries to be continuous. Incompleteness, in a sense, can be considered as open-ended, the essence of narrative architecture. Open-endedness of the narrative enables the repetition of the acts such as thinking, imagining, interpreting, designing, and educating. Thus, it allows the design action to be more unrestricted and diverse in architectural education.

“The repetitive fragment is the dream of a thought of action” (Elias, 2005, p.365). As the fragment is repetitive in nature, it reintroduces new perspectives on action and ideas, thus allows for thought reconstruction; becoming educational in the process. Education is a rethinking practice. As a rethinking act, narrative enables architecture to establish the relationships between thought and experience. Narrative, being a design method in architecture education, correlates with fiction and fragments. It exists through the interactions between fragments and fiction and establishes the relationship between the thought and the experience. These connections lead to a diversification of design approaches in architecture education and the development of multiple learning instruments. In this context, the narrative is crucial to the

intelligibility of fragments. Based on how they are brought together, fragments can be sequential or complex. When the narrative consists of fragments that come together in order, and it can be compared to traditional storytelling. However, when the fragments come together in a complex manner, it forms a narrative at different times and meaning levels. Unlike traditional storytelling, the narrative is about creativity. There is no specific order or rule. The fragments indicate different levels of meaning and source. Hence, narrative is not on a single time plane but instills a more significant whole without an invisible, gradual, sequential accumulation process between the past and the future. The narrative, whose fragments come together intricately, destroys, reproduces, reinterprets, and rearranges the fragments on several planes. As explained by Page, Harper, and Frobenius:

Rather than multiple tellers working collaboratively within the same interaction of turns, the shared stories form a constellation of evaluations, retellings and reactions which may not directly be connected to each other within a single sequence ... but nonetheless are embedded in a wider aggregation of talk about a particular topic, which in turn constitutes a social narrative (Page, Harper, and Frobenius, 2013, pp. 209–210).



Figure 2.5 The Fragments of Lebbeus Woods (Woods, 1997).

“Fiction, used this way, does not designate something known to be non-existent, but is rather the hypothetical postulation of an operative entity whose ontological status remains indeterminate” (Schaeffer, 2012).

As a design method, narrative needs a whole story and fiction as well as the fragment. Fiction offers architecture “a potential alternative to imagine, describe and realize ambiguous places loaded with latent possibilities” (Charley, 2019, p.11). Fiction is a structured construction activity. As a dreaming practice, it can both intuit and design; two acts which reinforce each other. Therefore, in designing, there

emerges ‘imagining the non-existent’ with fiction. Fiction creates the narrative as a vertical or lateral narrative through fragments. It positions and gives meaning to each fragment. Fiction “offers models or simulations of the social world via abstraction, simplification, and compression” (Mar & Oatley, 2008). Narrative can be defined as a simulation of events; fiction can thus create a deep and immersive simulative interaction experience. When reading narrative fiction, the idea of a simulation or imagination is linked to our subjective experiences. This simulation facilitates the transmission and understanding of narrative information and acquires a form of learning through experience, making it more attractive. The role of the story as the content of narrative expression in the relationship between narrative and fiction is “to contend that fiction, invention and imagination are not falsehoods but ways of bringing about a richer reality” (Swaranjali, 2018). In this regard, as Charley said, “the very fact that fiction ‘does not bear the responsibility of truthful representation’ enables experimentation and the exploration of alternatives, perhaps even discursive transformation” (Charley, 2019, p.28). As a result, fragments, as a structural component of the narrative act, exist with the embodiment of design thinking in the architectural design studio. It produces aphorisms as a verbal expression tool and sometimes represents the process of fiction; fragments are the narrative of the whole process, not of a final product. Therefore, they can be defined as a design discourse that expresses the idea of design.

2.2.4. Discourse

Narrative has a content plane (story) and an expression plane (discourse). “The expression plane is the set of narrative statements, where ‘statement’ is the basic component of the form of the expression, independent of and more abstract than any manifestation—that is, the expression’s substance, which varies from art to art” (Chatman, 1978, p.146). Narrative is an accurate description of a fictional story, a narration of recorded events, an expression of a representation. It can take place in language or any media. To support this with a statement of Barthes:

The narratives of the world are numberless. Narrative is first and foremost a prodigious variety of genres, themselves distributed amongst different substances - as though any material were fit to receive man's stories. Able to be carried by articulated language, spoken, or written, fixed, or moving images, gestures, and the ordered mixture of all these substances; narrative is present in myth, legend, fable, tale, novella, epic, history, tragedy, drama, comedy, mime, painting, stained glass windows, cinema, comics, news item, conversation (Barthes & Heath, 1977, p.79).

Narrative, as a component, has a story, and this story is expressed via discourse. A story has events, existence, and relations; it is the core of a narrative statement. Discourse is the use of a language to convey the story and its relations. "Narrative is a place where sequence and language, among other things, intersect to form a discursive code" (Scholes, 1980, p.200). In a sense, it is a language of discursive communication, and it is related to subjects, objects, and concepts.

Regarding this, "This transposability of the story," remarks Chatman, "is the strongest reason for arguing that narratives are indeed structures independent of any medium" (Chatman, 1978, p.20). The narrative has a structure that can both be articulated and integrated. In this sense, a medium that transmits content can be defined as a communication tool.

Structuralist theory argues that each narrative has two parts: a story (*histoire*), the content or chain of events (actions, happenings), plus what may be called the existents (characters, items of setting); and a discourse (*discourse*), that is, the expression, the means by which the content is communicated (Chatman, 1978, p.19).

Regardless of the medium within which it is produced, all narrative messages manifest at the same level independent of the techniques via which they are communicated. It may be transferred from one medium to another without losing any of its essential properties. "The subject of a story may serve as argument for a ballet, that of a novel can be transposed to stage or screen, one can recount in words a film" (Bremond, 1964, p.4). These stories are seen, heard, written, or drawn, and they can all be the same story. As Bremond explained, "That which is narrated has its own proper significant elements, its story elements: these are neither words, nor images, nor gestures, but the events, situations, and behaviours signified by the words, images, and gestures" (Bremond, 1964, p.4). Narrative discourse consists of a connected sequence of narrative statements which are produced in any media.

Narrative discourse, the 'how,' in turn divides into two subcomponents; the narrative form itself, the structure of narrative transmission and its manifestation, and

its representation in a specific materializing medium. “Narrative is often seen as a form of representation bound with sequence, space and time” (Cobley, 2001, p. 3). Narrative discourse is concerned with the relationship between the story and time. The story, which can be considered as the scaffolding core of a narrative, is defined as a representation of events that are temporally interrelated in a meaningful way. Thus, narrative is a series of connected events and processes that are typically learned, perceived, and experienced. As Prince said, it is not only a product but a process, not merely an object but also an act. In this context, narrative and time are correlated (Prince, 1987). Story and time create unity, continuity, and cohesion from the many interconnections and mirror each other. They emerge from and reproduce a story (Grosz & Eisenman, 2001). In this sense, time is seen as an essential component of narrative discourse. “The story has a temporal order all its own, which corresponds more or less to our conventional understanding of time in the world; a series of connected events organized around a few major transformations, which begins at a certain point, carries through its middle and arrives finally at its end” (Fulton & Huisman, 2005, p.61). According to Ricoeur, narratives are ‘tales of time’ that influence and transform events and stories as a sequence that begins and continues infinitely to the end (Currie, 2007). Besides the intense experience of time within architecture that the narrative performs, the analogy it establishes between textual, visual, and architectural narratives reveals another creation of the mental power of imagination.

Narratives in any medium or genre – visual or textual, novel or collage, drawing or film – are ways of producing and representing intermedia relations. As Altman stated: “Omnipresent and culturally privileged, narrative gains much of its power from its ability to change form easily and repeatedly” (Altman, 2008, p.1). The continuous translation of the narrative into different characters is related with the dynamic relationship narrative creates with the media. This interrelationship created by the narrative enables the production of architectural thought through narrative drawing as a design statement. In this sense, narrative can analyze a particular set of narrative tools — stories that function as bridging metaphors, mediating between concepts and real-life events — to better understand produced architectural thinking and argumentation.



Figure 2.6 Story-narrative-discourse relationship. (prepared by the author)

2.3. Contemporary Practices

This chapter explores the relationship between narrative and drawing from past to present through alternative pedagogies, paper architecture, workshops and exhibitions. With this approach, how other theorists, practitioners and educators have contributed to knowledge through architectural design experiments is explored and discussed through narrative actions and narrative drawing. Each drawn line displays the architect's knowledge, mentality, and communication between seeing and thinking and allow them to establish new relationships in addition to existing ones. Throughout history, the line has been a way of self-expression for human beings. Line/Drawing, as the cornerstone of architecture, is a creative and conscious way of thinking. Belardi associated drawing with the act of dreaming: "two words that, despite having very different etymological roots, describe two activities that have always had a give-and-take, collaborative relationship" (Belardi, 2014, p.41). The relationship between drawing and dreaming has long been dwelled on by architects. In the late 1960s and early 1970s, architects used drawings to conceptualize their imagined, unrealistic ideas and fiction for the future, such as Archigram's Walking City or Gaetano Pesce's Church of Solitude (Figure 2.7) In this sense, as a postmodern movement of the period, Archigram used Pop Art, Cartoon illustration, advertising imagery and science fiction graphics to break from the tradition of architectural representation (Aydemir, 2017, p.38). They searched for new forms, technologies and perspectives outside architecture; and were trying to uncover a language and practice those relevant shocks to their time. The architects used drawing as a method of leaping into an imagined, alternative future, 'unbuilt'¹¹ and utopian, which is defined as 'paper architecture'

¹¹ "The concept of **Ungebaut/Unbuilt** emerged as the title of Austrian architect Raimund Abraham's (1933-2010) exhibition and exhibition catalog held at Galerie Krinzinger and Galerie Museum Bozen in 1986. The word unbuilt, as used by Abraham, does not mean designs that were not built and remained as a set of drawings on paper. It does not imply the mandatory conviction of a design on paper. On the contrary, a concept, meaning 'non-building', becomes a manifesto. The concept of Unbuilt reflects the existential struggle of architecture to become autonomous

(Adamson, 2014). It is “an architecture that is meant to remain on paper: it is a pure idea” (Whitebread, 2014, p.3). Paper architecture is “very much abstracted from the need to build; it was poetic and slightly winsome in character” (Cook, 2014, p.81). Paper architecture demonstrates that drawing may be the subject of another mental movement in architecture rather than only representing buildings. Paper architecture aided in the development of representation and pictorial narrative as a rethinking and dreaming practice. Hence, “the multiple viewpoints afforded by the pictorial space also implied a simultaneity of events, reinforced by the increasing narrative content of the pictures...” (Sadler, 2005, p.148). In their book *Beyond Archigram: The Structure of Circulation*, Steiner argues that narrative produces a series of frames to represent temporality. These frames combine textual and visual media, interrelating the two modes of representation (Steiner, 2009). In this context, narrative and drawing, as essential parts of architecture, as a tradition from past to present, are essential to the creation of architectural thought.



Figure 2.7 Gaetano Pesce’s Church of Solitude and Archigram’s Walking City (Url-5-6).

Drawing is not only a thinking tool that is comprised of line but also a representation product created by the unity of different media. In a way, as Pallasmaa stated, “a drawing is an image that compresses an entire process fusing a distinct duration into that image. A sketch is in fact, a temporal image, a piece of cinematic action recorded as a graphic image” (Pallasmaa, 2009). In visual arts and architecture, line can produce different representations. The line mediates to acquire an experience between a thought and its visibility; based on these experiences, representation revises

from the 'building' and transforms into an idea where the possibility of a 'buildingless' architecture is investigated”, trans. by author (Avanoğlu, 2021, p.11).

information endlessly. Architectural representation has changed with today's technology and perspective. Through accumulation, however, it has been transformed in a layered way without destroying the past ways of thinking and expression. Each layered medium of expression/representation is based on a narrative/story. Since it has a discourse, the thought structures of such representations have the chance to be reconstructed according to the discourse. The reproduced thought materializes with different stories and media, such as collages, comics, 3D modelling, orthographic drawings, and painting. In this sense, 'narrative drawing' can be understood as designing through a story/fiction using all of these different media and bringing different images to reality with varied emotions and stories each time.

“The term ‘narrative drawing’ proposes an identity for features related to each other and, by making this proposal, helps identify, describe and substantiate the saliency of these relationships” (Grennan, 2017, p.xii). Narrative drawing, as Grennan stated, is a term that defines the relationship between narrative and line, as well as a visual and textual design medium, a place or thing around a story. It represents architectural thought by integrating visual and textual media tools. Narrative drawing provides the possibility to combine representation, theory, criticism, storytelling, and design. It imagines alternative worlds and engages in the design of architecture through storytelling. It offers narratives about curiosities, and attitudes, stories about fictional realities that invite new horizons to turn into possibilities. In addition, as Perez-Gomez



Figure 2.8 In his drawings, Bryan Cantley creates narratives with technology to deal with unknowable and impossible. He sees technology as an alternative perspective through which things previously unseen before can be seen. Thus, in the narrative he creates through drawing and technology, he aims to capture impossible objects (Cantley,2013, pp. 38-41, Url-7)

argues, drawing can be defined as a visual narrator as a reflection of the lived world (Perez-Gomez, 1982).

In parallel to design research and contemporary architectural design environment, new representation modes are also discussed by professional architects and via combined practices. In this context, narrative or narrative drawing is not only a way of (re)presenting the idea(s) of architectural design but also a way of (re)searching, (re)interpreting, and (re)producing. Each fragment contains various visual and textual media that (re)produce the architectural idea, establish the unity of meaning and how design thought is embodied; in this context and in view of combined practices, narrative or narrative drawing can also be considered as a juxtaposition of fragments. Fragments are a means of establishing unity of meaning and how design thought is embodied. Each fragment contains various visual and textual media that (re)produce the architectural idea. In this context, narrative can evolve into different dimensions and can be observed in various media with line in current architectural practices, such as 3D rendering, animation, collage, comics, or a sequence of orthographic architectural drawings. These architectural communication tools and platforms help enhance the practice of narrative drawing, each of which is communicated in daily life. With the interaction of multiple media, the influence of architectural design competitions, architects created narrative drawings outlining the background of the idea along with detailed drawings displaying the technical and construction solutions. With Archigram, Superstudio and paper architecture, the representation of architecture became more narrative-oriented and critical. Different architects and groups represented design thinking in different ways. Lebbeus Woods is one of the best representatives of the critical and comic book approach; Yona Friedman turned to cinema; Daniel Libeskind represented unbuilt architecture with his narrative drawing series, Chamber Works; Enric Miralles defined collage as a graphic narrative and expressed all his architectural works in this language. They addressed the transformative and flexible potential of drawing in architecture and aimed to

econstruct traditional architectural components and reconstruct them on a different axis.



Figure 2.9 Peter Cook sees drawing and storytelling as a provocative tool, also uses narrative drawing as a communication method by intertwining text and image. (Url-8)

Based on Bakhtin's definition of dialogue, narrative drawing is not just narrative or abstraction; it is a dialogue between fragments, none of which can be translated into another, with its language and perspective (Bakhtin, 2017). Thus, each fragment is a series of intertwined connections. Indeed, narrative drawing, as a type of design tool, can communicate metaphorically and associatively, covering the hidden components of architecture - conceptual and experiential. It opens an imaginary space in which poetic and rhetorical expressions are mediated in the visual construction of the narrative. Narrative drawing as a design tool is a visual communication language, one that lays the groundwork for an alternative approach in architectural education. With all these contemporary architectural practices, narrative drawing as a design tool is a pedagogical approach for architecture studios. NATØ, a group of young architects led by Nigel Coates from the Architectural Association in the early 1980s, was one of the earliest examples of this. As Jamieson stated: "NATØ provides an ideal vehicle through which to test the narrative potential of architectural production, presenting a clear moment when narrative concerns were brought to the forefront of architectural thinking." (Jamieson, 2017, p.46). NATØ narrates the echoes and similarities between the broader artistic, filmic and literary culture that emerged from the specific political, social and physical conditions of the 80s' London. By using the potential of the unity of narrative and line, the studio creates a new environment for learning, designing,

producing and representing. The studio goes beyond the means of any architectural media in aid of architectural education; it tells stories and triggers the imagination, interpretation, and questions about architecture; in line with this, narrative drawing can be defined as representations that transcend media. In education, a series of narrative drawings is perceived as continuous and interconnected, from the imagination to the visual realization; it is embodied by the construction and acceptance of the narrative(s) produced by different media, different purposes, different conventions, and expectations. In narrative drawing, the designer systematically transforms images of the entity being designed: each image provides feedback which informs the generation about the subsequent representations. Narrative drawing is seen as an exemplar of information processing in problem-solving and is investigated through cases from Studio Altı | Üstü experiments and examples from the literature of architecture. In line with this, narrative drawing is based on the concept of narrative as one of the most important ways of design. The explorations, essays, drawings, and discussions strive to arrive at a deeper and more sophisticated understanding of what storytelling has to offer to architecture.



Figure 2.10 Through the use of multimedia, Lebbeus Woods forms critical approach to architecture. The color, material and drawing employed represent alternative architectural speculations in each frame (Url-9).

To conclude, narrative acts materialise the architectural design idea as narrative drawing through the relationship between line and narrative. Narrative drawings create narratives with fragments. This process progresses continuously with narrative acts and is adopted as the design process of Studio Altı | Üstü. This chapter discusses thinking, drawing, fragmentation and discourse as the essential narrative acts of

architectural design thinking. However, there are several other narrative acts to be mentioned, such as learning, searching, designing, and reading. The line is the primary medium for the materialisation of these acts.



Figure 2.121 The narrative drawing can be considered as an example of the use of multimedia. Combining orthographic drawing, sketches, and several related icons, Miralles represented the architectural and conceptual fragments of the music school in Gandia through collage as a narrative (Url-10).

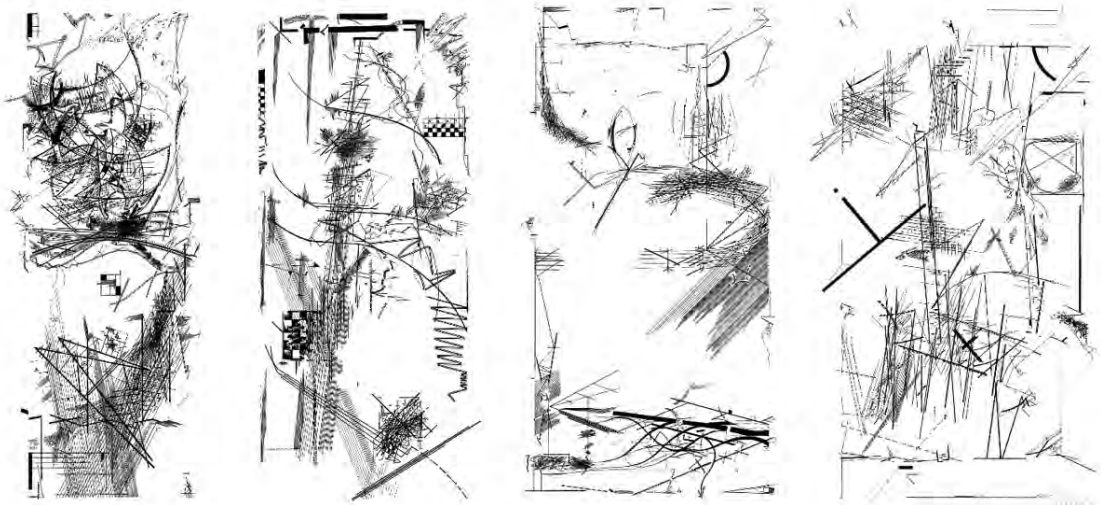


Figure 2.112 Chamber Works, Daniel Libeskind, 1983. This set of 28 drawings explores the relationship between music and architecture with an architectonic and graphic point of view and has influenced his later designs. This installation's image trajectory is linear, unfolding in time like a musical composition, but it may also be presented as intertwined in a more complex counterpoint arrangement with vertically structured drawings from the same series. In his youth, Libeskind was a great accordion player, and he called these works as “my first rigorous attempts to connect music and architecture. Architecture is based on drawings. A drawing is a score it’s a code, a language that has to be communicated to performers who then have a certain amount of leeway in interpreting that” Daniel Libeskind. chamber works: Architectural Meditations on themes from Heraclitus (Url-11).

For this reason, line and fragments produced with various mediums are defined as narrative drawings. In this chapter, while developing a definition of narrative acts, narrative drawing and its equivalents in contemporary practices are researched. In the next chapter, the equivalents of the defined narrative acts and fragments in the studio practice will be re-examined through the works of Studio Altı | Üstü.



3. NARRATIVE ACT AS A STUDIO PRACTICE

In this chapter, the narrative act will be reconsidered as a studio practice, and the expansions of the narrative act will be re-examined through related concepts; the place of the design studio in architectural education will be examined, and the behaviour of the actions in the studio and the design's effect on the design's quality and diversity will be analysed in the context of Studio Altı | Üstü environment. Finally, the role of repeated narrative acts in the design process will be discussed through the correlated concepts of research, production, interpretation and representation.

3.1. Design Studio

A significant part of this thesis examines the narrative's role in design studio practice. The design studio is the backbone of architectural education. Design activity in the architectural design studio is “a complex and process, which consists of people, process and products”, and it is always incomplete (Ataman, 2018, p.1). The experimental nature of the design studio involves “failed attempts and dead-end explorations”. “In this very deed, this waste and trial-error process is what makes architectural design a research, hereby the design studio a research environment” (Öztoprak & Çağlar, 2019, p.76). In a design studio, students learn through creative endeavors and work with their colleagues to find design solutions to real-life problems. Design solutions are produced through an iterative process, which encourages motivation and helps develop strong learning communities. This enables deep learning and sustainable retention of learning from design work. The use of design tools, one of which is narrative, plays a vital role in studio practice. Students use tools for various tasks at every stage of design. Education of architecture has social, interpersonal, and ethical aspects. Narrative, as it offers an opportunity for imaginative thinking and artistic expression about architecture, can also provide information about social and spatial conditions relevant to architecture. Thus, it also can be defined as a pedagogical approach. The narrative approach to architecture is based on the idea that architecture can be considered as a story and that architecture is a form of storytelling. Narrative facilitates learning instead of imparting knowledge (Fowler & Rigby, 1994; Moon, 2004) and helps increase reflective learning (Moon, 1999, 2004). In this sense,

narrative as a new act of learning instead of the traditional acts of thinking and making for studio practice unlocks students' capacity to design in a manner that includes a much-needed sensitivity to the meanings, atmospheres and settings that are already established and encourages creative projections of speculative future fictions.

Design is a complex activity that combines figural and conceptual thinking processes (Goldschmidt, 2001). It requires thinking through verbal-conceptual and visual-graphic representations known as the 'dual-mode model' in the literature (Akin & Lin, 1995). This chapter is mainly concerned with conceptual reasoning and the role of textual and visual representations in design. Narrative has a structural nature. By combining multiple media and aphorisms which are the essence of the story, narrative creates the architectural design and builds fiction through fragments. Fragments and aphorisms are the studio's way of learning and utilizing the knowledge of making. The fragments weave the whole learning process as a layer-by-layer narrative while emphasizing the essence of the design and the story's core. A narrative in studio practice is an act of thinking, designing, and constructing to integrate, connect or bridge the gap between theory and practice.

Architectural design studio is a dynamic environment for re-thinking, re-creating, and re-producing the architectural design, not an environment for transmitting architectural knowledge. It envelops a research based on architectural media, in line with which, Studio Altı | Üstü, an architecture design studio at TOBB ETU and an environment where experience is conveyed through fragments and fiction instead of knowledge, is discussed. Studio tutors define fiction as follows: "Fiction is a way for interpreting and understanding the existent, as well as a tool for design, which is inherent in every aspect of life. It is a place (with infinite possibilities) for imagining" (Çağlar et al., 2020). Fiction as a possible alternative way to imagine, describe and realize ambiguous places loaded with latent possibilities has a kind of presence in the beholder's mind, which allows them to recognize whatever expression they may encounter. Studio Altı | Üstü, as an architecture studio that proceeds through fiction, reconnects with life through the narrative. The role of narrative is to allow fiction, invention, and imagination to unveil a richer reality more deeply through imaginative understanding. It "allows for the structuring of past and present to be reconceived and re-experienced" (Swaranjali, 2018, p.294). Studio Altı | Üstü allows

for constant change and transformation in the design process and enables transitions to become ‘intermediate states,’ which do not seek a single design but rather the ‘third form.’ As stated by Lebbeus Woods in the Slow Manifesto:

Change is in particular transformation - one form changing into another - is not simply a matter of alteration of an existing form to create a new one. Rather, change creates what we could call a ‘third form’. This third state is in the state of changing (Woods, 2015).

In this sense, change can be seen as a process of becoming and not simply as an alteration of what is already there. Studio Altı | Üstü “focuses on fiction/story as a method for discussing the current problems of architecture, the city and the world, develops today’s critical view through design and believes that architects can construct different ‘structures’ through narrative” (Çağlar et al., 2020), and “helps outline ‘new ways of being in the world’” (Swaranjali, 2018, p.294).

In studio practice, narrative acts build stories in different ways and offer a way of drawing which uses fragmentation to evoke movement and multiple perspectives. Narratives are developed in Studio Altı | Üstü with the idea of thinking within the medium rather than drawing as a graphical representation of fully formed ideas. In this construction process, the design idea that the student expresses by drawing can sometimes evolve into a poem, music, or film; through which the importance of different is emphasized. The narrative provides a mental and physical experience that is beyond a description of a place or architectural elements in studio practice. Studio Altı | Üstü utilizes narratives as a dialogue between story and architecture while embodying ‘unreal, unbuilt, fictional’ through narrative and media and defines narrative drawing as a tool to mediate between the theoretical and practical elements of architectural practice within the design process. Narrative drawing is a potential alternative media to imagining, describing and realizing ambiguous places loaded with latent possibilities. It is also a juxtaposition of fragments in which visual and textual media are intertwined. Fragments are dynamic and subjective, determined by the way they come together. Fragmentation creates new narratives that are self-contained and offers up new possibilities. Old fragments of a whole gain a new relationship and meaning in their context. Therefore, it is always open-ended, as Palmer said, that it “is necessarily incomplete and full of blanks where nothing is said about a part of the story world and gaps where something but not everything is said” (Palmer, 2004, p.34).

In line with this, Studio Altı | Üstü is primarily concerned with investigating narrative acts as a method, a tool, a source of inspiration and guidance of the design practice/production process and questions how the fiction becomes a part of the realization of architectural thought in the design process. Through the line and the narrative, the studio developed a method and approach to an architectural design predicated on narrative and representative images – from the two-dimensional explorations of the drawing to the three-dimensional realization of objects and their arrangement in installations. Studio Altı | Üstü’s main goal with narratives is to “blur the line between the imaginary and the real” (Spiller, 2014, p.88) and to bring original insight into the territory of architectural narrativity. In the architectural design practice of Studio Altı | Üstü, the process of creating a narrative with serial drawing/visualization over story/fiction is broadly considered an architectural pedagogical model of transformative reasoning which takes place in creative problem-solving in the context of architectural design. Concordantly, the sequential structuring of design ideas ensures that each stage in their development is a source of feedback in the creation of subsequent phases.

Studio Altı | Üstü creates speculations for current issues and discussions around fiction each term while continuing to produce and explore new narratives for six terms. These speculations encourage the student's creativity while designing and using various media during the design process, allowing them to improve their technical abilities. Studio Altı | Üstü supports the use of alternative references along with the usage of multimedia. A storybook, a movie, a newspaper, an exhibition, an article, or a song can be the bibliography¹² for the studio. At this point, the references suggested to the students are of a decisive nature in the progress of the process. Each term, the boundaries of the studio are redefined through themes and projects. Themes such as climate change, energy crisis, migrations, digital reality, artificial intelligence, and nanotechnologies, which are already dominant in the first quarter of the twenty-first century, are discussed in the first term of the studio, ‘A Fiction for Life’ the 2020-2021 Fall Term, with a focus on the city, space, design in architecture, along with the question of how to approach a building. In the following 2020-2021 Spring Term, environmental and life-related problems examined in the Fall Term are re-discussed under the title of ‘A Fiction for Living Together’. Unlike previous terms, Studio Altı |

¹² See Appendix-17 for Studio Altı | Üstü bibliography.

Üstü re-interprets nature with the theme of ‘Play with Nature’ in the Summer Term of 2020-2021, with a competition series organized by non-architecture¹³, under the themes of ‘Into the Wild’, ‘Remote Work Cabin’, ‘Re-nature Rome’, and ‘Manhattan Wildscaper’, the studio expects the students to create representative images by the brief. The limited duration of the competition brings about visual restrictions, and predetermined colour palette improves students’ media use and visualization abilities during the editing process. 2021-2022 Fall Term, with the theme of ‘Re-making and ‘Reviving of Post-disaster Human Settlements and Recovery of Living After Natural/Human Disasters’, Studio Altı | Üstü explores the causes and effects of natural and human disasters on the world, looking at the future from the present. It produces and discusses ‘settlements’, scenarios/speculations. In the following spring term, the studio moves away from current environmental problems and tries to search and develop the interfaces of an unfamiliar virtual life with the physical world we know, with the theme of ‘Spectacle Fictions in the Immaterial Universe’. In this process, the use of multimedia is considered important; the term starts with physical spatial installation works and digital illustrations and short films which support the process. In the Summer Term 2021-2022, the sixth term of the studio, under the theme of ‘A Fiction for Rustic Life’, the studio “aims to re-interpret fiction about the house and life in the rural areas and to sustain the resources on earth, protecting the nature, ecosystems, biodiversity, water resources and soil; life is combined with agricultural production. The objective is to generate fictions for life that are to be explored together. During this term, Studio Altı | Üstü poses a question about how we live / will live and produce and represent in various media the house of tomorrow, which is in balance with nature, the universe, and all other living creatures, by re-interpreting rural life with today’s knowledge, techniques, and technologies” (Bancı, 2022).

¹³ **Non-Architecture** is a medium for design competitions, a community for architects and non-architects, an open-source online magazine, an independent publisher and a remote design studio. Non -Architecture Competitions aim to explore unconventional and unexplored design solutions in architecture, urban planning and design. The platform, organising various competitions since 2016, approaches the significant challenges of today's world from different angles with each theme.

Table 3.1: Studio Altı | Üstü Terms.

Studio Altı Üstü	Theme	Coordinator	Assistants
2020-2021 Fall Semester	'A Fiction for Life'	Nur Çağlar, Selda Bancı, Aslı Özge Zabun, Burçin Yılmaz	Defne Çakır
2020-2021 Spring Semester	'A Fiction for Living Together'	Nur Çağlar, Aslı Özge Zabun, Ali Khabanian	
2020-2021 Summer Semester	'Play with Nature' (With the competition of Non-Architecture on the theme 'Into the Wild')	Nur Çağlar, Selda Bancı, Aslı Özge Zabun	Utku Doğanay, Pelin Gür
2021-2022 Fall Semester	'Re- making and Reviving of Post-disaster Human Settlements and Recovery of Living After Natural/human Disasters'	Nur Çağlar, Selda Bancı, Aslı Özge Zabun	Utku Doğanay, Pelin Gür
2021-2022 Spring Semester	Spectacle Fictions in the Immaterial Universe '	Nur Çağlar, Aslı Özge Zabun	Utku Doğanay, Pelin Gür
2021-2022 Summer Semester	A Fiction for the Rustic Life '	Nur Çağlar, Selda Bancı	Utku Doğanay, Pelin Gür

Using narrative acts as a tool to provide students with inspiring grounds to reach other ways of seeing, Studio Altı | Üstü¹⁴ reorganizes the studio environment with narratives. To be considered a narrative medium in the context of the design studio, a medium must first create a message that is separate from the one that it can convey alone with a story/fiction, and second, the medium must have a different set of characteristics; these characteristics must include the sensorial channels it employs, its temporality, the technology and materials it uses, and its roles in researching, producing, interpreting, representing and materializing architecturally. With all these, Studio Altı | Üstü simultaneously has a linear and non-linear design process, which defends that design knowledge's conceptual and material components can be understood by thinking about them. This process has the duality of fiction/story as the concept and narrative drawing as the material as a means of transforming thought. It is repeated in every stage of design decisions. Throughout the process, correlated concepts are established as a pedagogical method and approach for Studio Altı | Üstü. While these concepts pave the way for design thinking for students, they also create evaluation criteria for studio tutors. In line with this and by building the narrative and design process with correlated concepts, Studio Altı | Üstü sets the stage for creative and triggering relationships between imagination and image, thinking and making. In

¹⁴ In addition to the studio tutors and assistants shown in the Table 3.1, Ali Khiabanian, Sibel Acar, Zelal Çınar, İrem Küçük, Behiç Ak, Hüseyin Yanar, Atacan Akgün, Negar Moghtadaei, Emre Akkaya, Mehmet Arıdoğan, Zeynep Dağlı Curalı, Mert Aslan, İdil Tayhan, Ali Sinan Öztürk, Damla Turan, Deniz Tuzcuoğlu, Galen Eker, Hayri Şengün and Gizem Özmen were involved and contributed in the studio process as jury members, visiting professors or workshop coordinators.

this chapter, this thesis tries to present the implicit and peculiar essence with the employment of correlated concepts and examples of Studio Altı | Üstü by comparing the medium and the textual-visual fragments. These examples manifest various ideas by speculating, researching, producing, interpreting, thinking, making, designing, materializing, and representing through various mediums such as collages, 3D modelling, manifestations, sketches, illustrations, orthographic drawings, and diagrams.

3.2. Correlated Concepts

Studio Altı | Üstü's studio practice is the product of an enquiry, various readings, academic experience, and a conceptual framework with a form of design and research that blossoms from line to fragments and from fragments to the narrative. It is only possible to produce thought and knowledge and create original architectural discourses and objects by focusing on concepts. During the thesis and studio process, it is crucial to conceptualise the design idea and develop it through concepts (Figure 3.1).

This chapter addresses the narrative acts discussed in preceding chapters and related concepts that create the conceptual relation between the narrative and Studio Altı | Üstü to build the theory-practice relationship through 'thinking by making' and to rethink studio practices with repetitive narrative acts. These correlated concepts that have been discussed, as they create and transform the narrative, can be defined as narrative components. In architecture, narrative acts include thinking, envisioning, designing, and educating, as well as any and all acts arising from such. To realize all these in the context of architecture, the relationship of the actions that take place through repetition in the process and the narrative should be deepened through horizontal thinking and design created by the narrative. Repetition, for Hume, "changes nothing in the object repeated, but does change something in the mind which contemplates it" (Deleuze, 1995, p.70). It changes nothing in the object that no element in one narrative sequence is the cause of another. "The role of the imagination, or the mind which contemplates in its multiple and fragmented states, is to draw something new from repetition, to draw difference from it. For that matter, repetition is itself, in essence, imaginary..." (Deleuze, 1995, p.76). Deleuze mentions that repetition is

imagination and mind at work. In this context, thoughts repeated in mind with narrative acts allow for the diversification of design thinking.

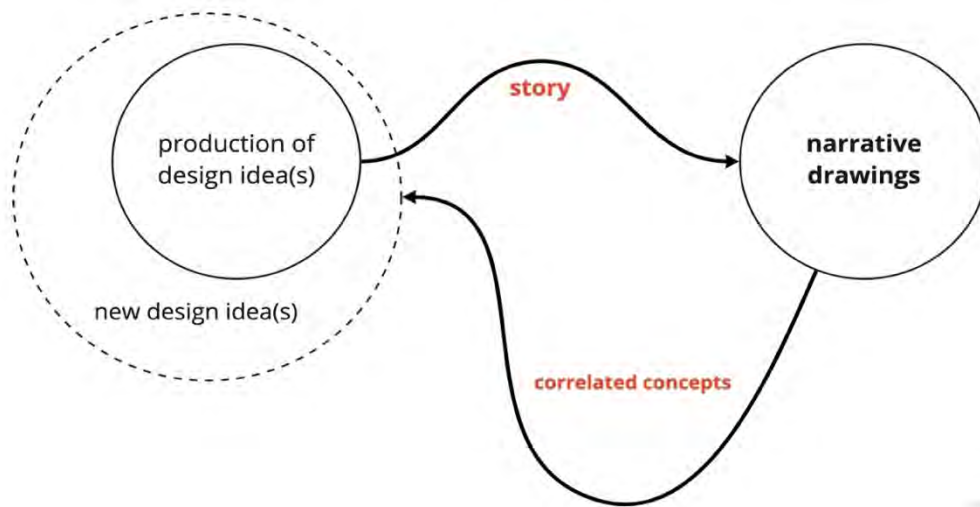


Figure 3.1 Evolution of thought with story and correlated concepts.
(prepared by the author)

Narrative is a choice of association; it is multiple realizations of a single basic story. As Deleuze & Guattari puts it, “There are no simple concepts. Every concept has components and is defined by them” (Deleuze & Guattari, 1994, p.15). These concepts transform each other, and this transformation through repetitive actions allows their meanings to be varied. These concepts, which form a pedagogical approach and thus describe the learning method, allow the construction of new stories and diversification of thoughts in the architectural design process in the context of Studio Altı | Üstü. In this thesis, correlated concepts are considered as a conceptual framework developed to understand the productions of Studio Altı | Üstü and includes the concepts of (re)producing, (re)searching, (re)interpreting, (re)designing, (re)drawing, (re)thinking and (re)presenting.¹⁵ These concepts are useful for figuring out the framework of narrative drawing as a design tool, uncovering its hidden meanings, and creating new narratives from existing stories. Also, correlated concepts generate an understanding of how the use of their medium evolved alongside their conceptual ideas.

¹⁵ **Re-** is a prefix that emphasizes repetition and meaning “again” or “again and again”.

3.2.1. Production | Reproduction

Production is one of the concepts which aids in understanding and the creation of narratives. Production in the studio process is an endless act. The architectural design ideas develop in different scales and mediums explored by the participants through the re-production of the knowledge within the frame of design thinking and new modes of representation. Designing through story/fiction brings about a continuous production. The act of re-production, which means to “produce a copy or representation of a cause to be seen, heard again” (Colomina, 2005, p.208), has been incorporated into the studio’s practices. As Colomina stated, “the craftsman, the storyteller, is the subject implicit in this dictionary definition of re-production. The craftsman’s universe is that of the identification of the object with the world. The object carries the traces of its maker: the clay vessel betrays the fingerprints of the potter, just as the story reveals traces of the narrator” (Colomina, 2005, p.208). In Studio Altı | Üstü, since the relationship between subject and product is constantly changing, production and re-production are two inter-correlated concepts within a continuous cycle. The idea of production is, in some ways, the printing of thinking, while re-production is the reflection of thoughts with the help of a drawing over the printed one, with the most basic drawing act of architecture. In this context, narrative drawing, as an architectural design medium, occurs through the re-production of design thought. Each production process shapes the final product by providing new clues to the design, creating new components with different feedback, and making the process dynamic. Each stage acts as a control mechanism which helps develop ideas by offering control over the way to the product. In the process, the architectural product obtained by repetitive actions can be reproduced and create new meanings.

The act of re-production can refer to the state of transition of an architectural product between the ‘design idea’ and the ‘embodiment of architectural thought’. The materialization of an architectural design idea enables the production of more significant numbers of potentially more creative ideas. In this context, as Perez-Gomez stated, “it is crucial to recognize the role of drawing as the embodiment of architectural ideas” (Perez-Gomez, 1982, p.6). The role of drawing in studio practice is not only to produce an accurate narrative from the line but also to physically construct the thought. Narratives allow us to imagine new creative solutions, architectural functions, or contexts as a design tool. Generating a design idea through narratives and embodying

this idea around a story is an interactive process. Each embodied thought is a source of inspiration for other ideas, and the approach is multi-layered as it constantly builds on itself. Regarding this, Tschumi stated that the dematerialization of every embodied thought/object in architecture intertwines spatial and conceptual relations (Tschumi, 1996). This re-production process in Studio Altı | Üstü shows that the interaction between materialized ideas and expansion of concept space, and further rapid iterations of this cycle, can contribute to the development of human feelings evoked by desires, contributing to the creativity of design.

3.2.2. Search | Research

The architectural design studio is the primary research environment of architecture. The design process is a constant search; in this sense, research can also be defined as systematic research or an experience or reinterpretation of architectural thought which is aimed at to acquiring new information about the design idea. The interaction between the reproduction and re-materialization of the thought is a reinterpretation of the concept. Research through narrative act can be both a research method and an object of research. Narrative research as a research method collects and analyzes material; and narrative as an object is a recollection in itself. “Narrative research refers to any study that uses or analyzes narrative materials. The data can be collected as a story or in a different manner” (Lieblich et al., 1998, p.2). Narrative research is a way of organizing architectural idea(s). “A narrative is organizing a sequence of events into a whole so that the significance of each event or fragment can be understood through its relation to that whole” (Elliott, 2009, p.3). Research in Studio Altı | Üstü is conducted by re-examining the relations between fragments and reconsidering the fiction/story. Narrative approaches are based on the textual production, visual production, or representation of individuals. Narrative research observes what and how something is said. In this sense, narrative drawings are representations of events in a sequence, and they are reinterpretations and essentially social in the sense that they are produced for a specific audience. Interpretation, therefore, becomes the basis of architectural design creation and research.

3.2.3. Interpretation | Re-interpretation

If there is architecture, there is interpretation. Although interpretation is an object of criticism, it can also be observed within the acquisition of architectural

creation. As Snodgrass & Coyne stated, “interpretation is a reconstruction, and ‘[o]ne has only understood what one has reconstructed in all its relationships and its context’” (Snodgrass & Coyne, 2007, p.8). In the architectural design studio, interpretation can be considered as a research and production approach. It can be utilized to reinterpret something that already exists or to create something unique from nothing. Interpreting requires some architectural tools and acts; for example, a representation is interpreting an idea visually/textually, and it therefore requires media. In Studio Altı | Üstü, interpretation can often be a way of questioning the real world or finding solutions to current problems. As an architectural production that uses multimedia in the studio, fictional and narrative makes architectural ideas re-interpretable within the environments of representation and production. Here, narratives, as an architectural production, make architectural ideas re-interpretable through representation and production. Re-interpretation emerges through various representational discourse and media modes, such as drawing, writing, modelling, collage, etc. Re-interpretation emphasizes the importance of the architectural thought process in all these mediums for narrative drawing.

The ultimate aim of the design process is the production of a visual representation of an entity designed with sufficient integrity and consistency, allowing the construction of a visual simulation of the final product, either physically or mentally (Goldschmidt, 1991, p. 125).

In this process, interpretation directly relates to (re)presentation. By Colomina’s definition, interpretation is “integral to the act of projecting” (Colomina, 2005, p.207).

3.2.4. Presentation | Representation

The design process is an interconnected combination of visual and conceptual thinking (Goldschmidt, 2001, p. 12; Akin & Lin, 1995, p. 236). This duality is used to describe textual-conceptual and visual-pictorial representations. On the other hand, Schön's idea of reflection in the medium of representation includes design thinking, an explicit articulation of knowledge, as an essential part of reflection-in-action and reflection-on-action (Schön & Wiggins, 1992). This approach takes the complementary quality of design activity to an iterative and reflective understanding, to which correlated concepts specifically focus on. Representation can also describe processes and objects. Representations are conversations during the design process (Schön & Wiggins, 1992, p. 135; Lawson, 2006). They do not merely communicate

ideas to others but serve as a primary vehicle for thinking (Do & Gross, 2001, p. 142). For instance, sketches allow architects to 'read-off' non-visual functional issues from visual features (Suwa & Tversky, 1997, p. 401); they are representations of pictorial thought and inspire new design ideas. On the other hand, diagrams are made of symbols and are about concepts (Do & Gross, 2001, p. 137), and they express and visualize design questions. Certain representations are qualified with their productive capacities for new types of realities (Deleuze & Guattari, 1988), while some are described as extraordinary diagrams (Schumacher, 2011) different from common assumptions of plans, sections, elevations, and details and can be engaged in the formation of a potentially reproducible practice of design. Studio Altı | Üstü, in parallel with design research, discusses various representation modes as design practices. With narrative, Studio Altı | Üstü produces architectural design ideas with representations which allow students to "read-off non-visual functional issues from visual features" (Suwa & Tversky, 1997, p. 401). Representations are produced by narrative drawing in the Studio Altı | Üstü, which can be defined as the 5th dimension¹⁶ of architecture (Spiller, 2013, p. 15). With narrative drawing, Studio Altı | Üstü can represent architectural design ideas. Representation forms the basis of the conceptual elaboration of architectural projects and the entire formation process. With the developing technology and different representation methods, narrative drawing becomes a temporary, dynamic, and subjective reflection of changing architectural thought. The narrative drawing represents the architectural design process and the created design product as a sequence of fragments (images and texts). Each of these images is a fragment of architectural design. The fact that the fragments come together at different levels of meaning, depending on the context, the aim of their production, and how they are represented, enable them to create different narratives. Through Walsh's narrative discussion, narrative drawing can represent a narrative transmission and a story that is known or experienced before. In this context, narrative drawing primarily consists of narrative representation and the second transferring of fragments formed by narratives between each other (Walsh, 2007). In summary, representations are links between figural and conceptual; they are conversations; they generate new interpretations and

¹⁶ Besides the existing 3 spatial dimensions of architecture, time is considered as the 4th dimension. In this thesis, 5th dimension describes the alternative approach/perspective that Studio Altı | Üstü contributes to architectural design and education through narrative and narrative drawing.

are used for visual testing in the design process. In this way, representations encourage the generation of new ideas and the construction of associations thereof.

As a result, all these correlated concepts which exist as narrative acts, through endless repetition, increase the effectiveness of the acts of producing, researching, interpreting and representing in the design process and serve as a guide for Studio Altı | Üstü in reading, understanding and evaluating the design process. Each of them organise the design process and are themselves a medium of communication between the studio tutors and the students.

3.3. Re-Thinking Narration in Architectural Design Studio

Design is a multifaceted activity that combines figural and conceptual thinking processes (Goldschmidt, 2001). It requires thinking through verbal concepts and visual-graphic representations, defined as the 'dual-mode model' in the literature (Akin & Lin, 1995). This duality in architecture occurs through both contrasting and similar concepts/acts in architecture. It is helpful as a design tool for creating or removing boundaries in architecture design studios. The architectural design studio has a cyclical relationship between imagination and image. Rethinking, reinterpreting and producing the image with the correlated concepts mentioned in the previous chapter requires an act of imagination, and the resulting image is always different.

Narrative in architecture investigates the relationship between architecture and imagination and, through multimedia, reveals new interpretations of images created from this interaction (Figure 3.3). Studio Altı | Üstü reinterprets these relationships and builds new and deeper bonds between imagination and image, along with the narrative drawing. Most phenomenological explanations of imagination have considered it a form of vision, a subjective or transformed way of perceiving the world. This understanding of imagination and its representative relationship with the image is a narrative-based architectural learning method.

As the shared etymology of the two words suggests, imagination is commonly connected to image rather than language, and seen as the capacity to develop mental images in the brain-images that are not direct perceptions of the surrounding context (Havik & Sioli, 2021, p.161).

In this context, imagination reveals different forms of interaction (drawing, telling, writing, and making) for architectural education, together with stories and narrative. In architectural studio practices, narrative drawing, visual representations, visual thinking and making have the potential to open new vistas, line of thought and compositions. Narrative drawing as an image illustrates the imagination generated by narrative. Architecture can be imagined differently with narrative drawings than it would be with other representational forms often used by architects, such as orthographic drawings, photographs, or modern maps. Unlike traditional forms of architectural representation, narrative drawing has a characteristically different effect on the imagination, as it addresses issues such as impermanence and empathy that are difficult to communicate through traditional architectural representation. It is crucial to address the fusion of eye, mind, and hand in the design process while discussing narrative drawing as a studio practice/design tool. As Pallasmaa stated, “The union of the eye, hand and mind creates an image that is not only a visual recording or representation of the object, it is the object” (Pallasmaa, 2009). The eye, mind, and hand work collaboratively in the design process. Whatever tool is used, this process consists of a mental transference combined with the act of making. ‘Visual thinking’ might be considered a design act in this collaborative design process. All human actions, from the abstract and theoretical to the realistic and practical, are covered by visual thinking. Visual thinking exists alongside seeing, imagining, and drawing as a mind transfer. All this is a process of gathering information from the observed environment and subconsciously refining it by associating the images with personal experiences. It can only happen in the context of vision, imagination, or drawing tools, but all three of these channels can interact with the narrative. This visual thinking process consists of a mental transference combined with the act of making, regardless of the instrument utilized (Figure 3.2).

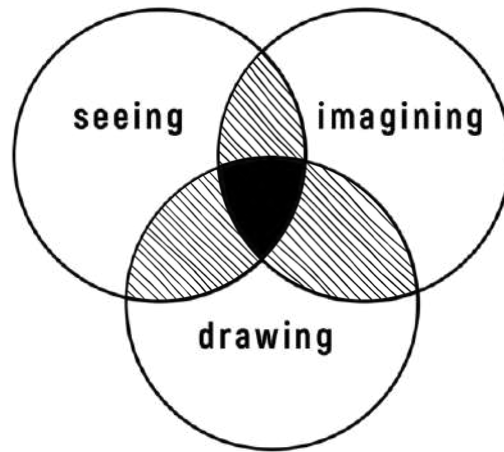


Figure 3.2 Seeing, imagining, and drawing intersection diagram. (prepared by the author)

The practice of architecture is the practice of design. The architect can create a design idea from a complex weave of interrelated problems with diverse and often contradictory contexts into a single distinct design proposal particular to its site, context, and program. The architect uses design to propose a question and develop its dimensionality and response. It is a reflective practice in which the production of drawings, such as sketches, models, collages, and images, is an essential component of the design process. Architect combines its media and a certain sense of craftsmanship with the act of drawing for making and thinking. In architecture, there is a dialectical relationship between thinking and making. John Berger points out this dialectic interaction of making and thinking: “Every line | drawn reforms the figure on the paper, and at the same time it redraws the image in my mind. And what is more, the drawn line redraws the model because it changes my capacity to perceive” (Berger, 2007, p.112). Architects have a creative imagination and the capacity to construct alternative realities and do so with unique methods, tools, and techniques.

One cannot know whether the image first arose in one’s mind, and was then recorded by hand, or whether the image was produced by the hand independently, or whether it emerged as a result of a seamless collaboration of the hand and the drawer’s mental space. It is often the act of drawing itself, the deep engagement in the act of unconscious thinking through making, that gives rise to an image or an idea (Pallasmaa, 2009).

As Pallasmaa said, making can be defined as the embodiment of design thinking as an act of unconscious thought. Making is, in a sense, a kind of inquiry on

how information is constantly produced and transmitted. It is the finding of a place for changing ideas and thoughts in the material world. The relationship between thinking and making can conceptually be compared to the relationship between narrative and fragment. Making is a structural part of thought or a set of fragments. The fragment plays a central role as both the carrier of knowledge and the result of the making process. The act of making is a way of working with and integrating all the different perspectives characteristic of architecture and need to be addressed.

Making as an architectural studio practice is more than just creating a physical model; it is also the act of generating ideas with the imagination of an image. In this context, “[A]rchitecture is both substance and act. The sign is a record of an intervention –an event and an act, which goes beyond the presence of elements, which are merely necessary conditions” (Eisenman, 1998, p. 197). To ‘make’ with narrative in the architectural design studio is to produce ‘inner images’ as a part of thinking (Zumthor, 2006, p.59). These images are then reproduced to form fragments of design thinking. Making is an action that defines the process of the architecture studio—the act of thinking and making progress. The path taken in this process needs a vehicle and object to transfer the collected information. At this point, narrative and narrative drawings serve as tools and objects of thought and making. Along with narrative drawing, drawing is an essential tool to represent thought and the act of making itself and its object. The potential of drawing to evolve into various media creates new interactions between image and materiality.

Models of design thinking in architecture have traditionally oscillated between drawing and making, visual and material. Advanced design and manufacturing technologies, along with digital modes of representation, did not only bring design thinking models, but also reconciled the dual nature of the design process (Tepavčević, 2017, p.72).

Thinking and dreaming of an image; creating, destroying, and remaking are the acts that define the whole design process of Studio Altı | Üstü. With these in mind, the Studio cases with the correlated concepts and these essential acts in the following chapter have been examined (Figure 3.3).

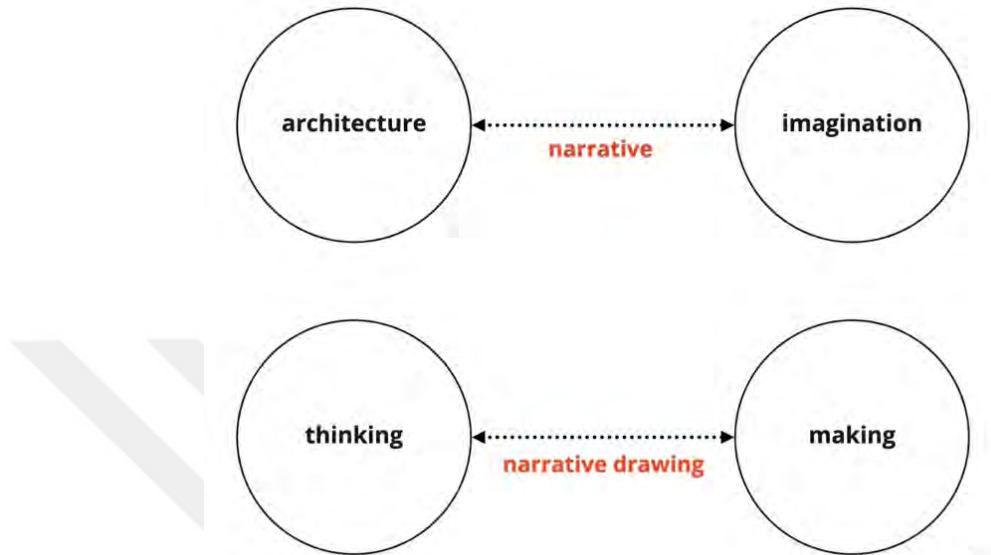


Figure 3.3 The relations of architecture-narrative-narrative drawing. (prepared by the author)

3.4. The Manifesto

Building on the conceptual and practical content presented in the previous chapters, I will try to define the studio's character with a manifesto:

Studio Altı | Üstü:

- is an experimental architectural design laboratory; it produces, reinterprets/designs/imagines, and reproduces its knowledge and sources.
- is a process-oriented studio practice focusing on the achievements in the process rather than the final product. In this process, during which the invisible is also revealed, it is essential to expose flaws, mistakes, and doing so by trial and error.
- designs with narrative acts. The design tool and output of the process are narrative.
- is a place for fiction for dreaming (with unlimited possibilities).

- which constructs new realities through narrative, sometimes destroys the existing reality and sometimes aims to change the heroes of life; cities and space in the existing reality.
- can be defined as a play without consequences, open-ended and generative, as a collaborative practice which involves making, thinking, organizing, and interpreting.
- whose participants play a role as the narrators, authors and actors of this play as far as their imagination can allow.
- utilizes narratives as a dialogue between story and architecture while embodying ‘unreal, unbuilt, fictional’ through narrative and media and defines line as a tool to mediate between the theoretical and practical elements of architectural practice in the design process.
- has agents; as one of the primary agents, the line forms the basis of the narrative. All the energy of Studio Altı | Üstü resides in the line; it starts with the line, develops and transforms continuously, and creates narrative drawings.
- has a critical approach. Through written and visual media, it represents the criticism of the lived environment in a speculative manner through fragments and without any restrictions.
- has correlated concepts; correlated concepts are both narrative acts and evaluation criteria.
- offers an incomplete process with constantly repeating narrative acts. Also, it is open to reinterpretation and discussion; therefore, it is open-ended.
- is an environment of freedom; everything in the studio can be deferred or suspended at any time; nothing is a task.
- represents not merely speculative or real life but a temporary narration of life in its fictionalized form, which departs from real life.

3.5. Studio Altı | Üstü Cases

In the previous chapters of the thesis, the narrative and narrative drawing are defined as the conceptual and material tools of the architectural design studio. The development and representations of the line defined as an agent of the narrative in different dimensions will be shown as a reinterpretation of the works produced during the six terms of Studio Altı | Üstü. When the works produced by the studio throughout this process are considered with the concepts of ‘aphorism | connotation | media |

fragment | story', the works create an alternative studio experience through repetitive actions such as production, research, interpretation, and representation in terms of the mutual relations they establish.

In the first term of the studio, the 2020-2021 Fall Term, remote working, resource consumption and lack of public space have been identified as the main problems associated with COVID-19, which was the current topic of the age. Students were expected to gain an awareness of the place they live in, to tell stories about current problems and to present proposed architectural solutions within a narrative. In Figure 3.4, Ecrin Akkaya discussed the conceptual and spatial gaps created by COVID-19 and conceptually and spatially re-explored spaces through urban intermediate spaces and developed usable spaces for resocialization. Under the theme of 'Fiction for Life', the student redesigned these areas around a story. In the design process, which proceeds as a narrative, the new socialization potentials of urban spaces are defined in fragments through narrative drawings, utilizing visual and textual media. While the fiction/story is told in a different time scale through a character, the concepts of social and public space are reinterpreted in these fragments. Throughout this process, the student used written and visual media to tell her story through a character. She produced narrative drawings using sketches, 3D models and textual representation approaches that deal with the imaginary relationship between the visuals and the character. She made observations and researched the environment she lived in. In the following weeks, she started to re-interpret and design her environment based on this research. In response to the character's existential crisis, she reconstructed public spaces and places through a series of speculative actions.

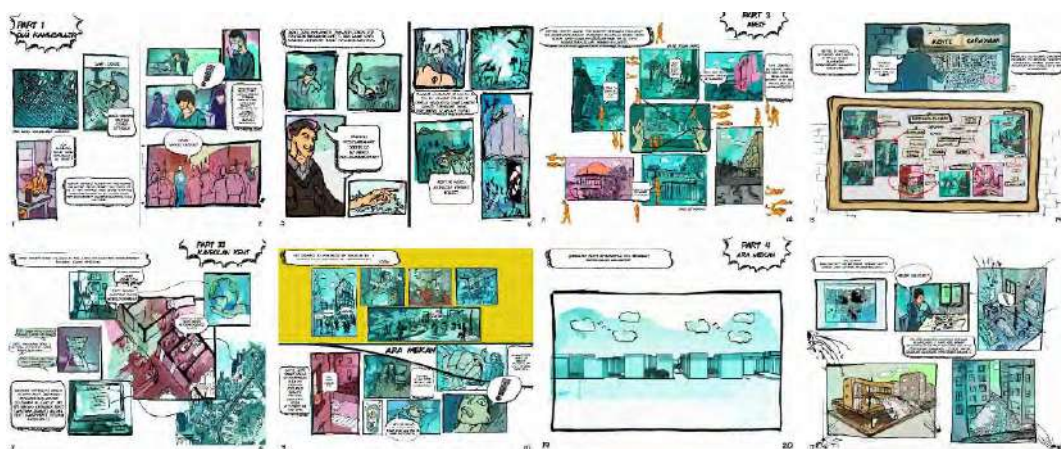


Figure 3.4 Narrative Drawings, Ecrin Akkaya.

A design idea is developed by producing parts through the actions of creating, thinking, and remaking. With the concretization and representation of ideas, the fragments are constructed as a narrative. In the early period of the studio, this work was found to be effective in creating fragments around fiction and story, visually and textually representing them with the aid of narrative drawings and finding a speculative solution to an existing problem and thus gaining importance.

In this sense, along with the linear narratives produced with a similar approach in the studio, there are also narratives that offer a structural proposal which organizes the life fiction vertically rather than horizontally. Some examples of this are given in Figure 3.5. This design reinterprets fragments of life; collects and compresses them on a vertical axis, thus producing an 'imperative coexistence' scenario. Cansu Çelik, by this endeavor, produces speculations about a tower by making use of technology and futuristic life scenarios.

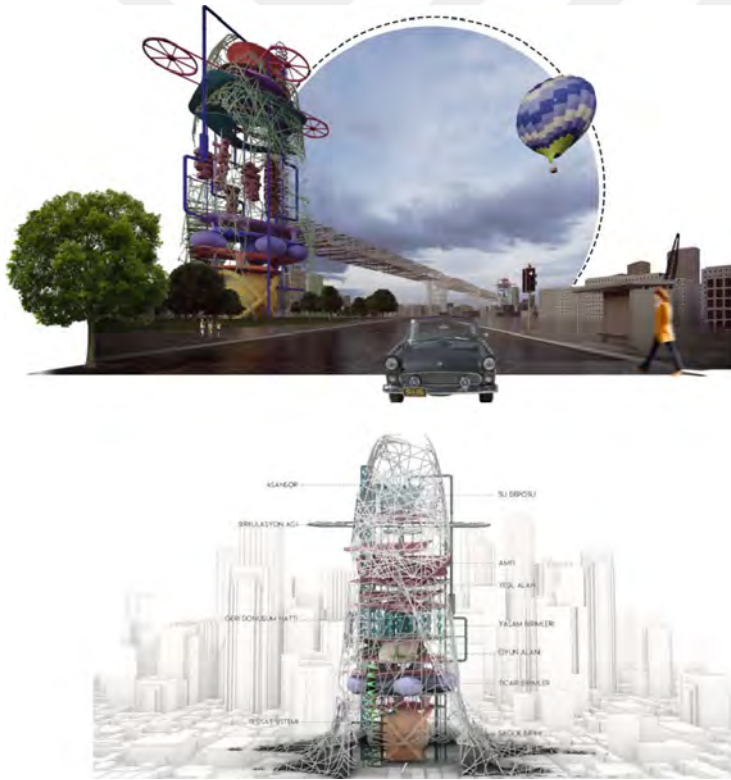


Figure 3.5 Narrative Drawings, Cansu Çelik.

In the 2020-2021 Spring Term, the second term of the studio, in Figure 3.7 & 3.8, Aysu Haşimoğlu reinterpreted the relationship between people, society, and the city and argued that similar processes regarding “simplifying, organizing, intensifying, and distributing” are used to develop towns and that variety can only be reached

through the diversity produced by the fusion of a city's components. From the student's perspective, the primary design problem was the machine-like repetition of cities, stratification, and submission to uncontrollable chaos. To solve this, she thought that the city should be dynamic like the people, that it would not be static, and that she could direct the relations she would establish. She worked on strengthening the relationship between imagination and image. While doing this, she expressed the human being as the subject of the city with a 'point'. She represented the dynamic relationship that the city created with its components with line. These each line/bond developed into a new urban component and the design's primary focus. (Figure 3.6)

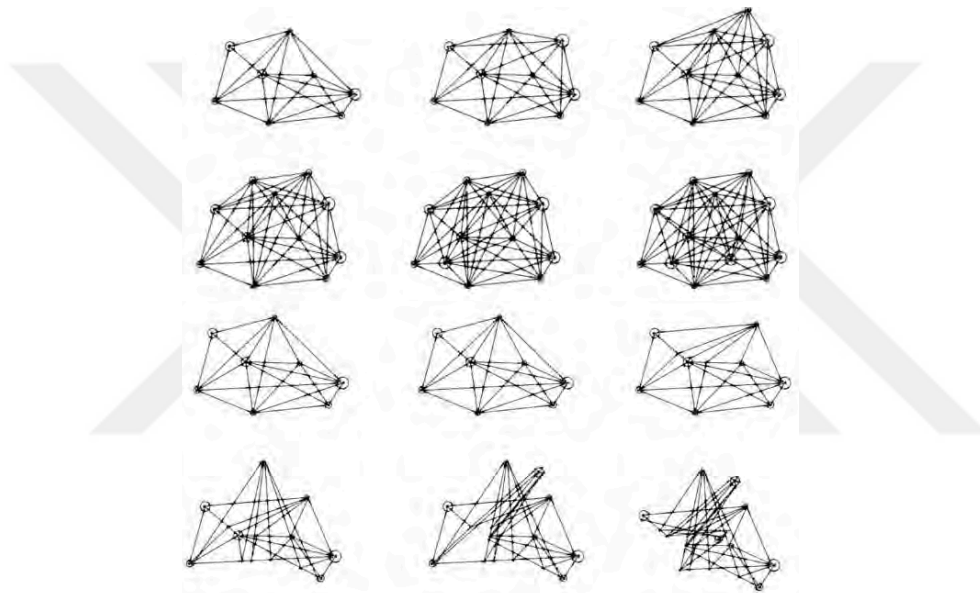


Figure 3.6 Line Relations, Aysu Haşimoğlu.

The student's new urban component has a flowing shape and is colored red. Throughout the narrative, the story of this component is supported by different media uses and aphorisms. Her intellectual process, unlike other projects, was more argumentative and questioning. The design, which started by rethinking the city and researching public lives, began to materialize in the middle of the term. In this process, she created a story by combining the fragments she made through 3D modelling and sketching in a specific order. At the end of the term, she presented a narrative which

consisted of a new component of the city that reproduces streets, avenues, living spaces, and spaces of togetherness (Figure 3.7)



Figure 3.7 Narrative Drawings, Aysu Haşimoğlu.

In the second term, Dorukan Dündar, while questioning publicity and the city, reinterpreted the fiction of “living together” through the duality of nature and human. Assuming that man grew with technology, he extrapolated the loss of some human characteristics and the production of buildings as if nature is ignored, and created a narrative series with coloured sketches and 3D models over a story. This narrative consists of 4 chapters 'destruction | rebirth | rise | settlement' and the story is formed on the speculation that nature will destroy people and structures in the future. He represented this future fiction through fragments by redesigning daily life acts. It was appreciated that he chose himself as the main character and that he established a strong relationship between his imagination and his productions (Figure 3.8 & Figure 3.9).



Figure 3.8 Narrative Drawings, Dorukan Dündar.

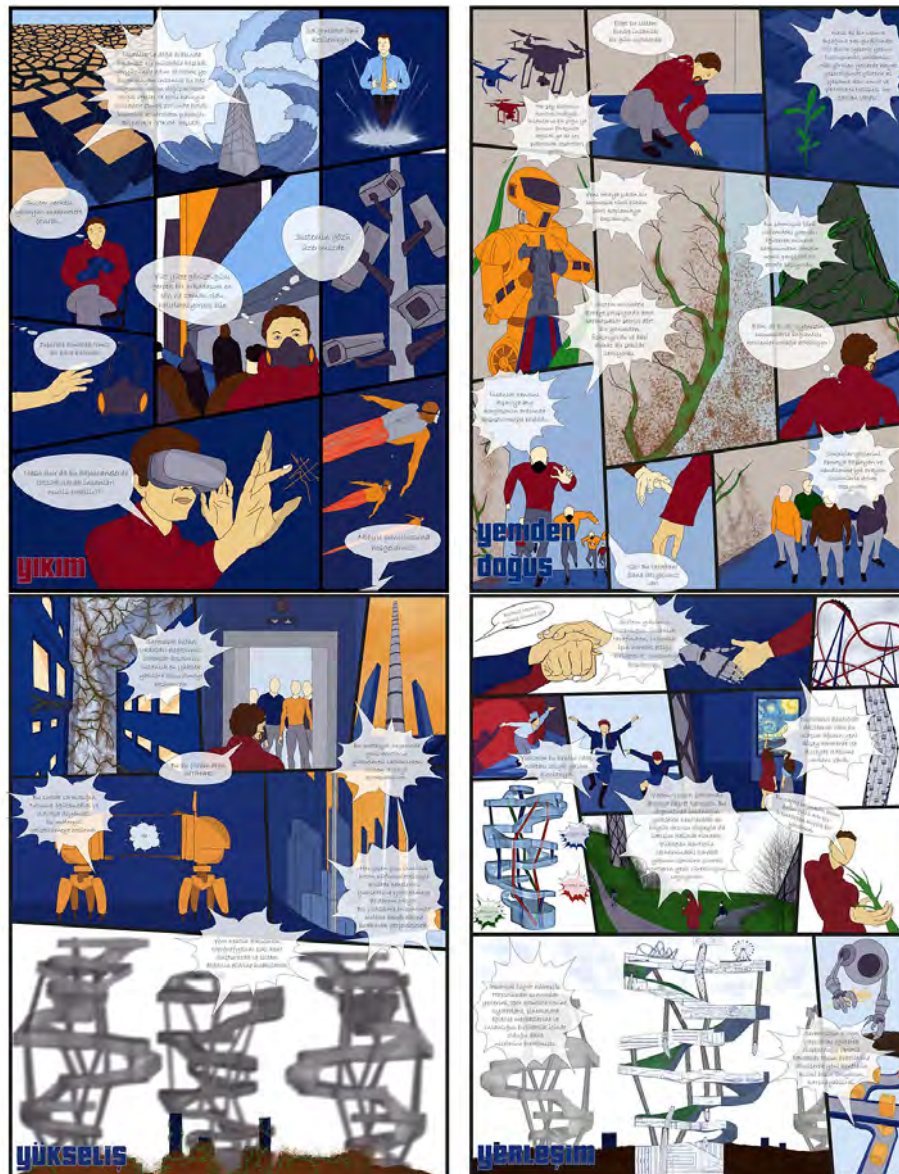


Figure 3.9 Narrative Drawings, Dorukan Dündar.

Studio Altı | Üstü looked for the possibilities of living together and has since turned its focus to nature in its third trimester (2020-2021 Summer Term). By participating in a competition series organized by Non-architecture, the studio reinterpreted the theme of living together with nature. With the theme of 'Play with Nature'; new productions, interpretations of nature and representations in accordance with the competition layout were created for three different competitions. This term, unlike others, included some restrictions on the student's freedom on materials such as color palettes, canvas sizes, and location. In line with the demands of the competition, 3 different representations were expected from the students for 3 competitions, respectively, 'Remote Work Cabin', 'Re-nature Rome' and 'Manhattan Wildscrapper'. In the first competition, a cabin design suitable for remote working was expected, in the

second, the historical texture of Rome was expected to be rethought with nature and its relationship with nature was expected to be strengthened, and in the third and final competition, a skyscraper design in a skyscraper city like Manhattan was expected. During the whole process, the students produced designs that were awarded by non-architecture by reproducing them on a single image. İrem Kekilli, who was awarded the 1st prize among these designs, designed a ‘wildscrapers’ by rehabilitating and transforming an existing skyscraper (Figure 3.10). By using a mixture of geopolymer material and genetically modified bacteria around an existing building, structures, gardens and office modules were built with a 3D printer. With its gardens and shared office modules, the wildscrapers offered people different spatial experiences among the grid plan and building stacks of Manhattan, different from the life of the city. This re-structured skyscraper provided new places to its users and citizens and satisfied the need of people who are looking for different living places from the crowded and cramped life of Manhattan. The student produced three fragments to represent the design; These fragments are a plan of the skyscraper, a 3D perspective and a perspective section.

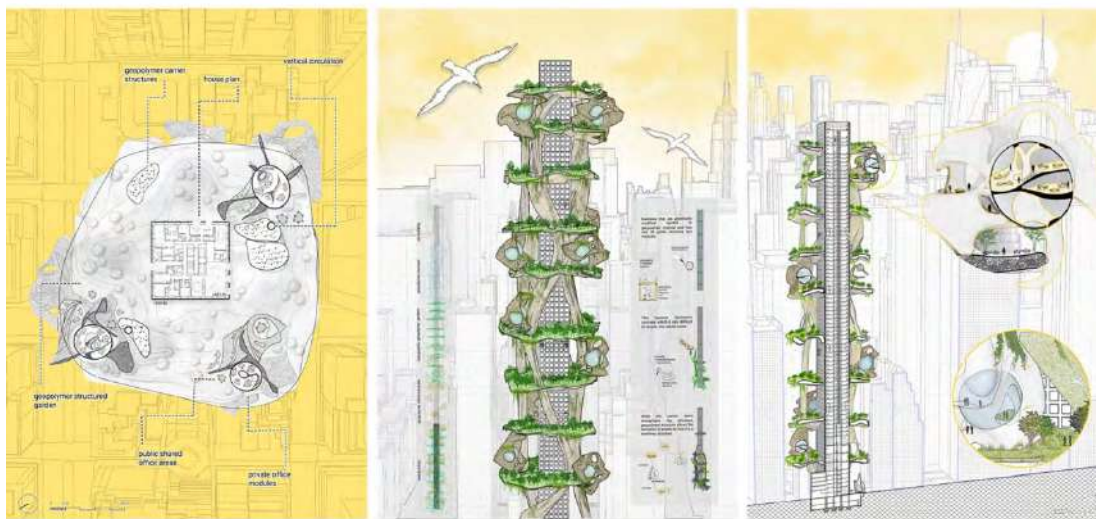


Figure 3.10 Manhattan Wildscrapers, 1st prize of the competition, İrem Kekilli.

In the Fall Term of 2021-2022, the fourth term of the studio, students reinterpreted ‘Post-disaster Human Settlements’ through the story of a natural disaster. While some of the students created fragments based on a world submerged by a natural disaster, some enhanced their architectural designs based on the recent fire disaster we experienced in our country. In Figure 3.11, Esma Nur Sert represented the components

of space/underwater life around a story through the use of fragments. The conceptual and physical/biological structure of the reefs, and the principles of movement of jellyfish, which constituted the study's starting point, were taken as reference and architectural thought turned into a narrative around disaster fiction. In the disaster scenario presented by the student, the world is underwater and there is no longer any life on land. In this direction, everything that people and all other living things require for survival has been redesigned underwater. Isolated living spaces have evolved into settlements that use the metaphor of reproduction and living acts have become symbiotic.

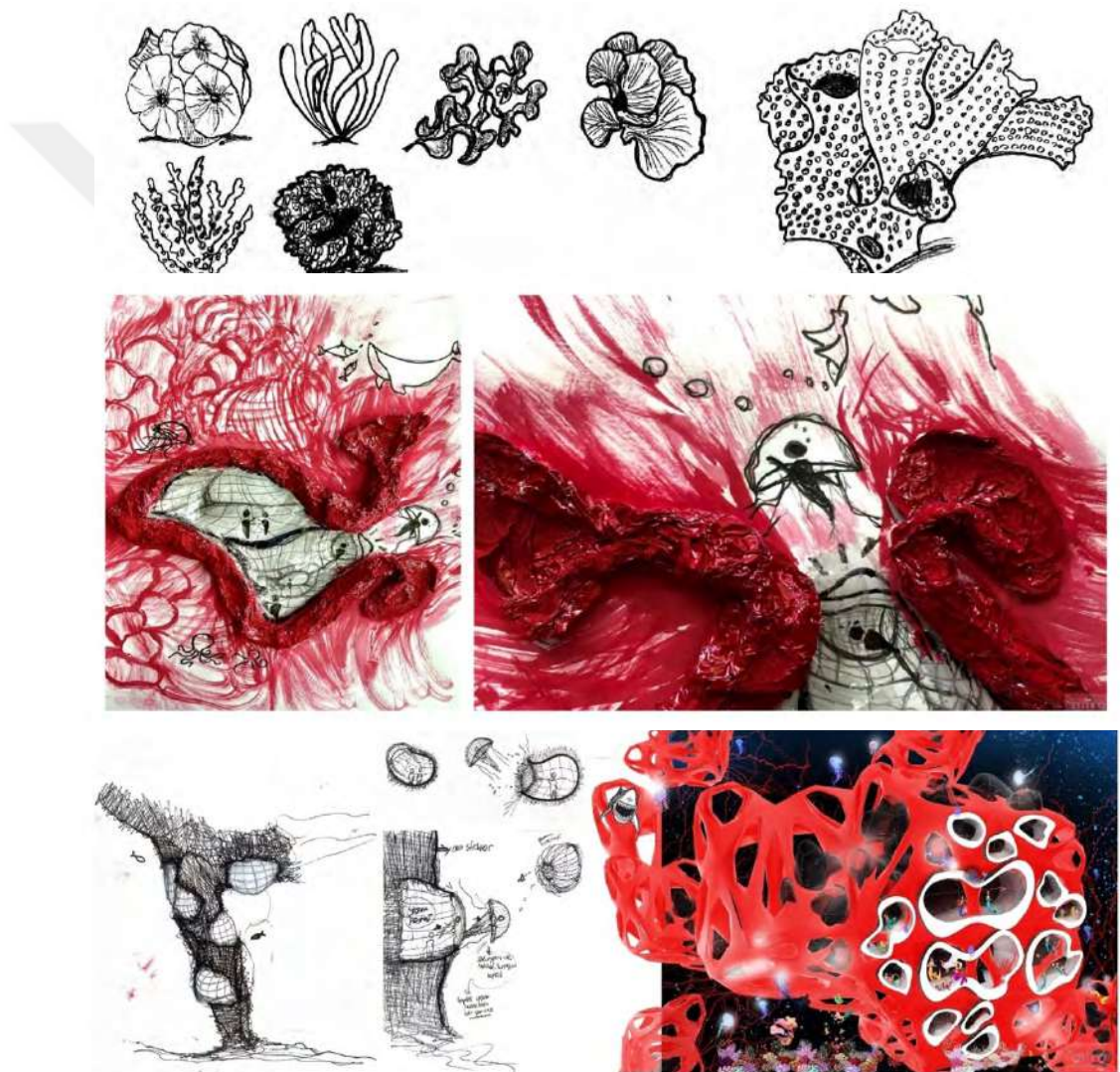


Figure 3.11 Narrative Drawings, Esma Nur Sert.

This work generated speculations and narratives about a new life underwater through the repeated dialogue between the design idea and multimedia. The fragmentary structure of the coral reefs and their reproductive patterns triggered the

student's creativity and the student physically reinterpreted the coral reefs. During the process, she concentrated on the feasibility of living spaces and created alternate fragments for topics such as heating, lighting, and adapting to live with and without oxygen. The user has redesigned each living space, and each living space was built distinctly. She used a variety of representations to develop the narrative which contained the line during this process. The design concept was materialised using collages, gifs, and 3D digital models.

Another work that produces life fiction by imagining a submerged world is shown in Figure 3.12. In this study, unlike the others, İlayda Karagöz focused on the adaptation of the urban ground, not the human. The student redesigned the urban ground in a 'layered-water absorbing-producer-metamorphotic' manner. Thus, it created new living spaces for people without disturbing their routine. When the ground is exposed to water, it swells to create new niches, thus transforming the disaster into an opportunity to create new public spaces.

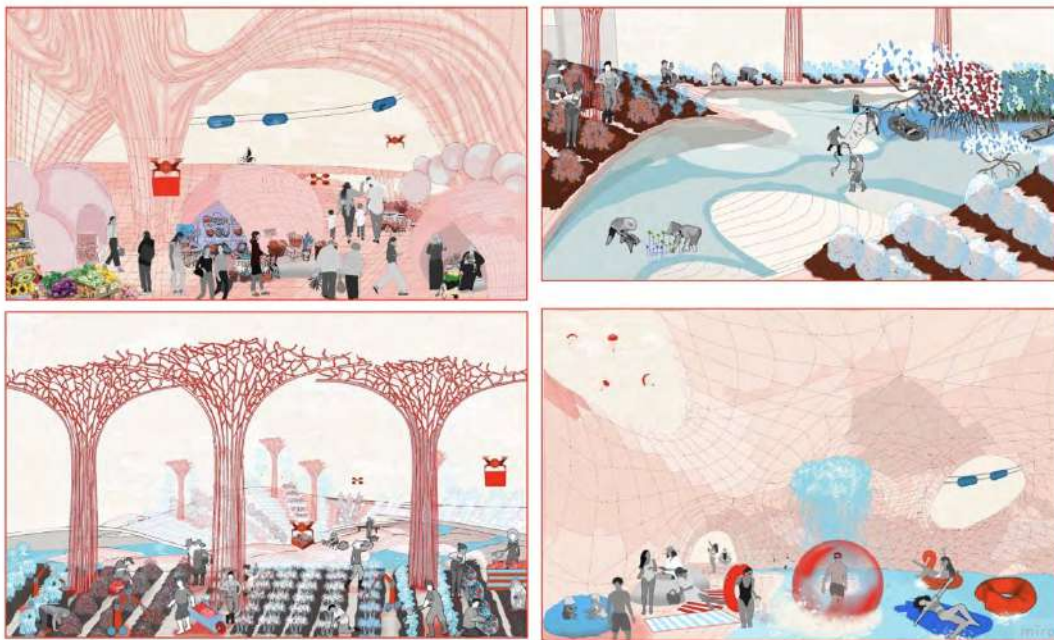


Figure 3.12 Narrative Drawings, İlayda Karagöz.

In the fifth term of the studio, different from previous terms, designs were produced under the theme of 'Spectacle Fictions in the Immaterial Universe'. The process started with the reinterpretation of emotions and the production of emotion maps. Then, the physical equivalent of the maps produced in the immaterial universe was sought through installations. These maps were created and developed with digital models and animations to show how spectacle fiction directly related to emotions can be produced in the immaterial universe (Figure 3.13). On the other hand, the

installation played a decisive role in the design process of the theatrical fiction that the students tried to construct in a physical world. In this context, Doğukan Güngör has reconsidered the city through fiction in a crowded metropolitan city where business centres and routine life are overgrown their bounds. People can put on glasses and move on to another world from everyday life. He expressed two different worlds and two different lives with various visual media tools. His fragments also emphasized the change of architectural representation tools in the changing world. While he represented physically existing cities with line and orthographic drawings, he described the virtual world with luminous net-like threads. He transformed the emotions he created on the emotion map into spaces on the plane. It was remarkable that the student combined two worlds in a single narrative through fragments with various tools and fiction.

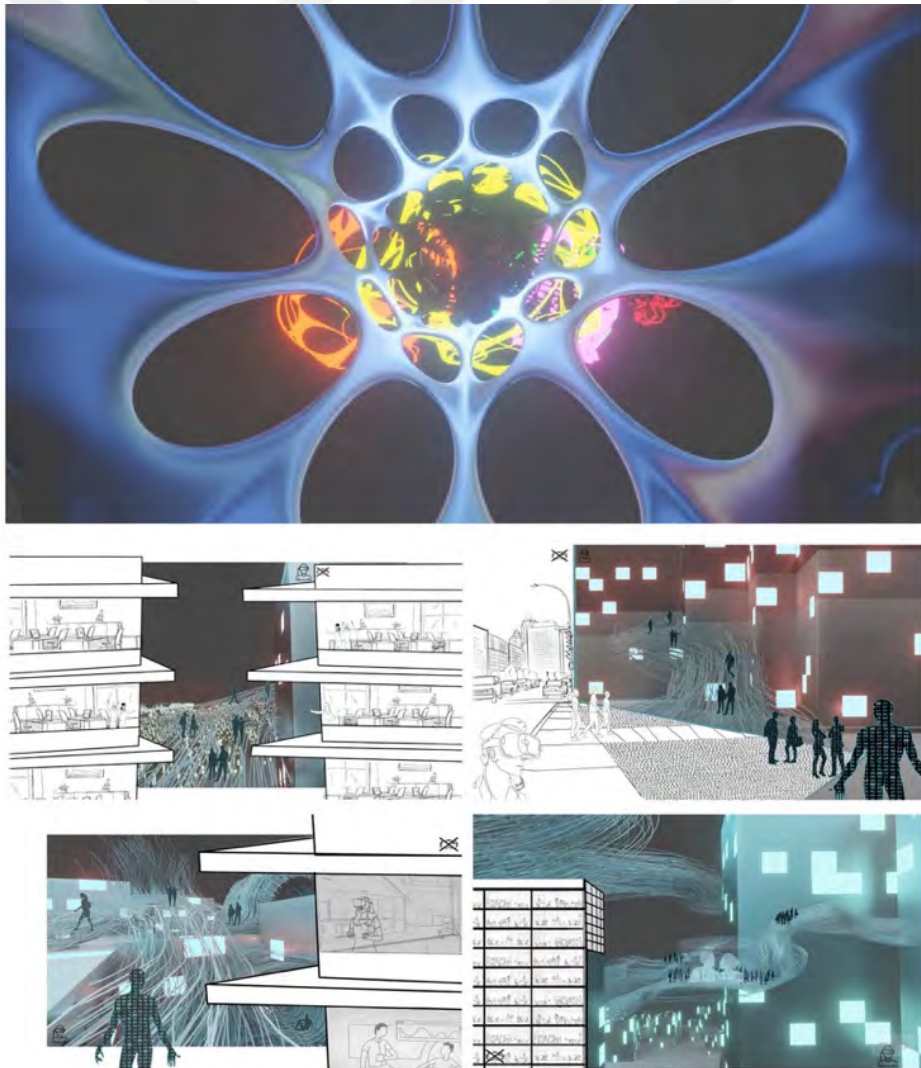


Figure 3.13 .Map of Emotions&Narrative Drawing, Doğukan Güngör.

Another student, Osman Neşeli interpreted the studio theme as a digital game and designed a new public space in the city. The designed public space is a game and interaction centre where the user can direct their emotions and, in a sense, rehabilitate. During the term, the metaverse concept was included in the studio's literature, and the students re-examined the concept (Figure 3.14).

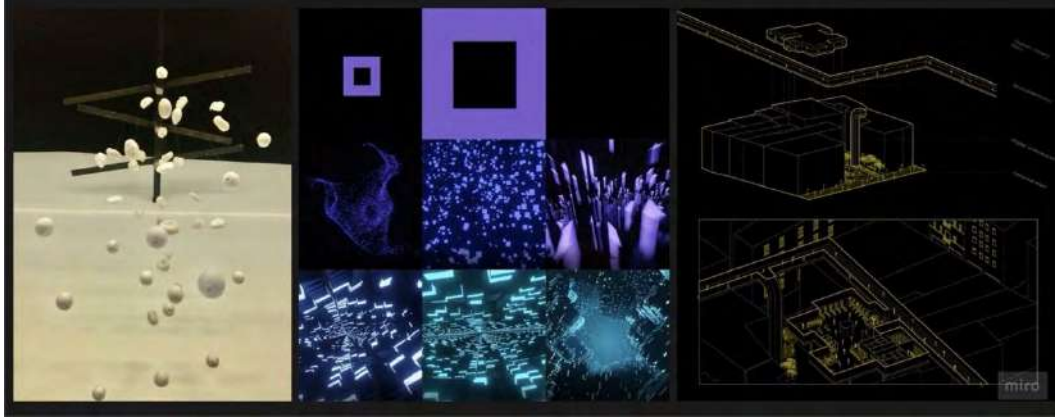


Figure 3.14 Playground narratives, Osman Neşeli.

The theme of 'A Fiction for Rustic Life' was discussed in the 2022 Summer Term of the studio. In the process that started with a 'house', the students questioned the elements/fragments of the house. This inquiry started with traditional collage studies and then diversified around students' fiction using multiple media. Village observations made during the process gave students clues about rural life. In Figure 3.15, Asu Pala has combined the alternatives of rural life with a mobile house by addressing the limited ways of making and living conditions observed in rustic life. She has set up the elements of the house in a dynamic way, revealing the usage patterns that change according to the seasons, night, and day. The student dealt with the necessities of living together and privacy separately and represented the fragments of a life she produced around a story. While making this, she visualized her story with 3D models, hand drawings and used videos and gifs to emphasize movement.



Figure 3.15 A Rustic House Narratives, Asu Pala.

Some of the students, such as Gökçe Başak Şahin and Şeyma Özkoçak, dealt with the deficient/worn out/incomplete aspects of rural life and produced fragments to 'heal the wounds of the village. In doing so, they reinterpreted the elements of the existing village houses and redesigned the existing life. (Figure 3.16 & Figure 3.17)

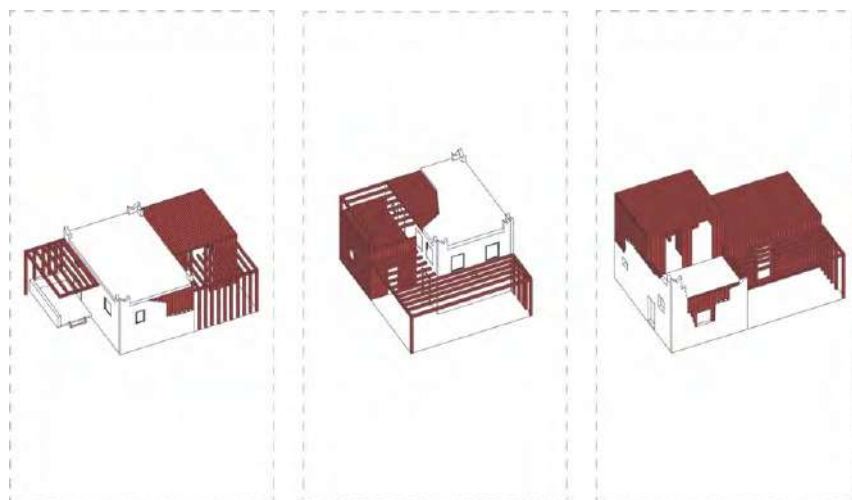


Figure 3.16 Narrative Drawings, Gökçe Başak Şahin.

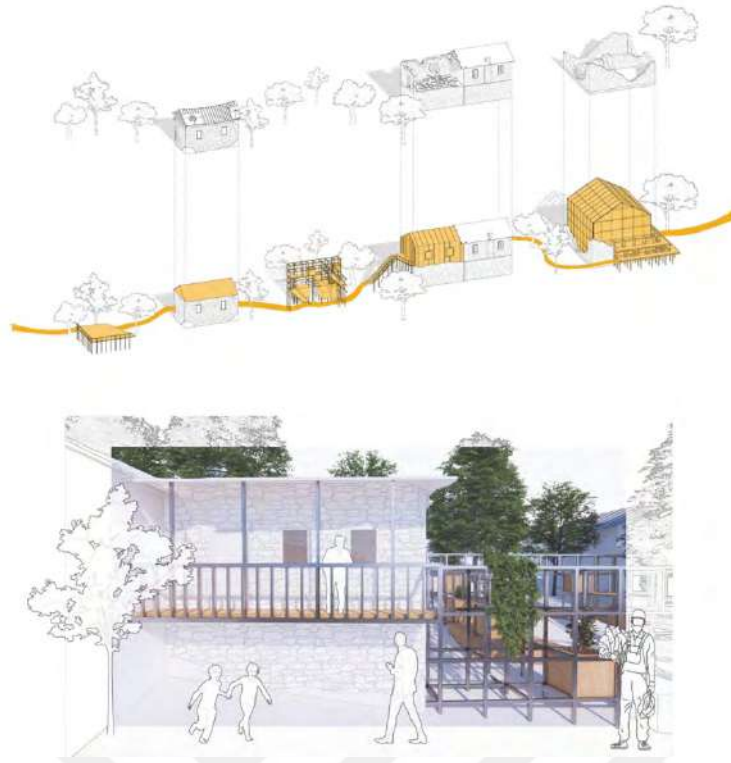


Figure 3.17 Narrative Drawings, Şeyma Özkoçak.

In addition to the emphasis on media, Studio Altı | Üstü produces narratives that strongly relate to literature. In this context, manifestations on rustic life and new views/insights on social issues/deficiencies were also produced. While the questions about home, place and borders were manifested; the position of the woman in the village as a social issue, her difficult life and the inadequacy of educational opportunities have found its architectural counterpart as ‘the story of a woman reader/educator in the rustic life’. (Figure 3.18)

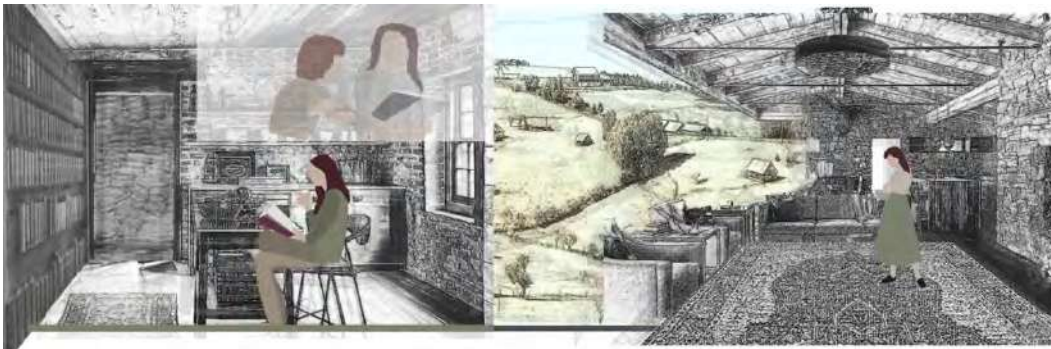


Figure 3.18 Narrative drawings, Aykut Nesne.

The whole world is in the house, but where is the "home"?

The house is a suspended box, perforated with windows without interruption. The box is in the middle of the meadow, dominating the garden. It cuts the view in such a way that there is no such thing as the front, back or side of the house. Yet, it allows nature to flow through and does not limit it.

There is no such thing as a place. At first, the boundary seems to be found only on the wall, that is, its mask. But then, this new understanding of the border puts the status of the wall into question. It is no longer a question of whether we are here or there but whether we are on this side of the wall or the other. But this does not mean that one side is inner or outer.

The question of where the house is is about what/where we set boundaries. This house is sometimes the village house where we were born and raised, sometimes a high-rise apartment in the city. Sometimes a bed we dream about while we sleep, sometimes under a tree. A reflection of the life lived outside in the house. The place where we are both alone and crowded is a courtyard. It is both a wall that embraces the street and the one that is the most distant from it. It is a painting we look out of the window and the curtain we put on the picture. Both abandoned and longed for. The most private, the most public. The most limited, the most unlimited. The house that is not there even if its whereabouts are unknown...

How rigid can the border be when the house is indefinable or defined by so many things? The boundaries we speak of melt away between what we call "outside" and "inside". These borders are like doors that open spontaneously in the slightest wind, ambiguous boundaries that do not know how to behave...

Anıl Tunç, Manifesto of House, 2022 Studio Altı | Üstü Spring Term¹⁷

These cases provide previously unexamined insights into not just the architectural development of students but also the holistic and experiential aspects of architectural education. When the concepts of ‘story/fiction’ and ‘media’ are considered in the

¹⁷ Translated by the author.

Tüm dünya evin içinde, peki "ev" nerede?

Ev havada asılı duran bir kutudur, kesintisiz her yeri pencereyle delik deşik edilmiştir. Kutu çayırın ortasındadır, bahçeye hakimdir. Manzarayı öyle bir keser ki evin önü, arkası, yanı diye bir şey kalmaz. Doğanın içinden geçmesine izin verir onu sınırlamaz.

Yer diye bir şey yoktur. Önce, sınır ancak onun maskesi olan duvarda bulunabilecekmiş gibi görünür. Ama sonra, bu yeni sınır anlayışı duvarın statüsünü tartışmaya açar. Mesele artık burada mı yoksa şurada mı olduğumuz değil de duvarın bu yüzünde mi yoksa öbür yüzünde mi olduğumuz meselesidir. Fakat bu, bir yanın iç bir yanın dış olduğunu belirtmez.

Evin nerede olduğu sorusu neye/nereye sınırlar koyduğumuzla alakalıdır. Bu ev bazen doğup büyüdüğümüz köy evidir bazen şehirde yüksek katlı bir apartman dairesi. Bazen uyurken hayal kurduğumuz bir yatak bazen bir ağacın altı. Dışarıda yaşanan hayatın evin içinde bir yansıması. Hem yalnız kaldığımız yer hem bir avluda kalabalıklaştığımız. Hem sokağı kucaklayan bir duvar hem ona en mesafeli olan. Hem pencerenin önünden dışarı baktığımız bir tablo hem tablonun üzerine örttüğümüz perde. Hem terkedilmiş hem hasret duyulan. En mahrem en kamusal. En sınırlı en sınırsız. Nerede olduğu bilinmeyen bilinse bile orada olmayan ev...

Ev bu kadar tanımlanamazken ya da pek çok şeyle tanımlanabilirken, sınır dediğimiz şey ne kadar katı olabilir? Bahsettiğimiz sınırlar "dış" dediğimiz yer ile "iç" dediğimiz yer arasında eriyip gider. En ufak rüzgârda kendiliğinden açılan kapılar gibidir bu sınırlar; nasıl davranacağı belli olmayan muğlak sınırlar... (Tunç, 2022).

context of the studio, repetitive actions such as research, production, representation, and interpretation come into play in terms of the interrelationship they establish and have different outputs each time. These acts/concepts play an essential role in Studio Altı | Üstü's learning process analysis and the final designs/works. While these repetitive and directly related acts/concepts pose triggering questions for the students in the design process, they also allow the studio tutors to analyze and classify the outputs. At Studio Altı | Üstü, students create and transform architectural design thinking through narrative. Narrative is essential to the studio as it opens the horizon in ways unimaginable, so it is essential for architectural learning. The narratives tell us that the world does not revolve around us; It shows that there are different lives, perceptions, and numerous possibilities, and every possibility creates different stories. In this context, the narrative is a constant movement of mind for architectural learning. Therefore, Studio Altı | Üstü can be defined as a play without consequences, open-ended and generative, as a collaborative practice which involves making, thinking, organizing, and interpreting.

3.6. Re-interpretation of The Studio

The research introduced and detailed in this thesis discusses a pedagogical experiment with narratives as an alternative design tool and a design product to explore the trajectory of educational progress in architecture. Recognizing the design studio as the heart of architectural education, previous contributions and recent trends in design learning are explored within the framework of the study to understand and predict projections for the future. In previous chapters, narrative and narrative drawing has been studied as a design tool in architecture and architectural design studios. Studio Altı | Üstü, a pedagogical approach which reorganizes the studio environment directly, is studied as a way of learning and teaching. Studio works have been reinterpreted with the conceptual framework established to understand the works of the studio and to evaluate relationships.

On the other hand, this chapter was deemed necessary to evaluate and discuss all these conceptual and practical expansions, to re-establish relationships and make sense of them. Studio Altı | Üstü is a process-oriented studio practice focusing on the achievements in the process rather than the final product. These achievements are parts of the story and can be evaluated through the multi-media use of fiction and acts.

Narrative creates learning and teaching processes with related concepts (research, reproduction, reinterpretation, and representation). Rethinking, producing, and researching on a single theme, bringing new interpretations to the emerging product, and representing it differently each time enables the studio to employ a multi-layered and multi-dimensional studio practice. Associated concepts, representations, and reorganization of the studio environment are considered essential, critical, and ultimately central to discussing the architectural design studio in view of the research aims.

To evaluate, interpret, reveal, and present these critical issues, ‘process analysis diagrams’¹⁸ were created for each student. These diagrams show how medium, and act overlap in the design studio and the role of narrative in establishing these relationships through correlated concepts. When explained with selected images, studio cases define a final product, however, Studio Altı | Üstü and this thesis attach importance to the process, not the result. At this point, these process analysis diagrams can also be defined as the snap sketches of the dynamic process between imagination and design act in the studio, in other words, fiction. These graphics attempt to show that the studio cases are constantly ambiguous and dynamic, even after the conceptual framework for creating a studio practice through narrative has been constructed. In a broad sense, it is about the dynamic nature of narrative in architectural education and the diversity of design it creates; It should be emphasized that these graphics were produced to speculate on the interpretable future of the design studio. As can be seen in Figure 3.19, the variety of acts in the design studio (reading, writing, drawing, imagining, modelling, presenting, painting, or watching) and medium (collage, painting, graphic novel, music, digital model, book, or documentary) overlap at specific or unspecified

¹⁸ With process analysis diagrams, the intersection of narrative acts and media in Studio Altı | Üstü is reinterpreted for each student individually, and a completely subjective evaluation of the design processes are presented with the aim of opening a discussion within the scope of the thesis.

points. What defines these conflicts are the way the narrative constructs the process with correlated concepts.



Figure 3.19 This diagram shows the intersection of medium - act with correlated concepts in Studio Altı | Üstü.

In these diagrams, the process of students in Studio Altı | Üstü is reflected; each fluid line shown with four different colours represents one of the related concepts. As seen in Figure 3.20, where the orange line rises, it represents the concentration of the intersections of the medium on the top and the narrative act on the left. As a result, the correlated concepts line is uncovered through the intersections of acts and medium, and these diagrams represent unique images for each student, like a fingerprint.

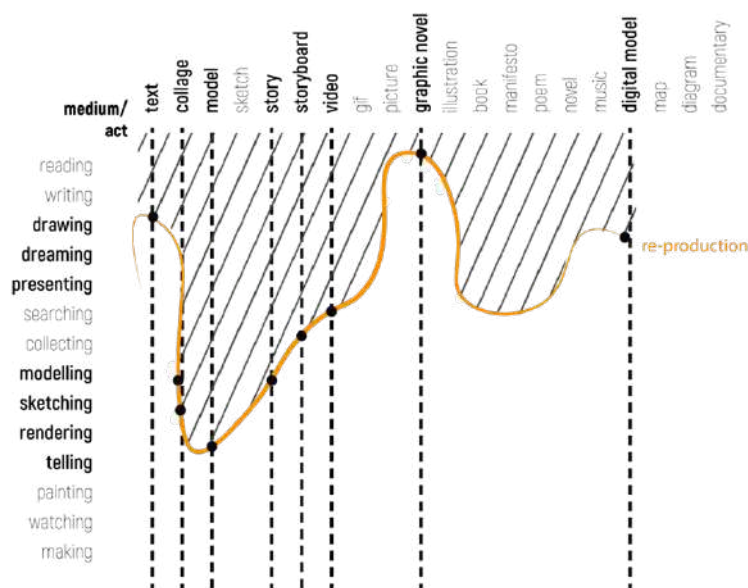


Figure 3.20 A guide to interpreting student process analysis diagrams.

In Figure 3. 21, the process analysis diagrams of two students from the first term are shown. This term is important as it is the first term, and it is the first ‘different’ process where both the studio tutors and the students are expected to improvise. Expected requirements from students this term are:

- Questioning the reliability and transferability of architecture with a story | fiction,
- Researching the idea of architectural design by using different sources (film, poetry, theatre, painting, sculpture, novel, children's book),
- Examining the reproducibility of the architecture with aphorism | story | connotation | media and fragment,
- Finally, to reinterpret the representation of architecture without the familiar architectural tools (plan, section, elevation) with unlimited media and imagination.

In line with all these, the students produced the design idea by using the given resources. As seen in the process analysis diagrams, the students' research, interpretation, production, and representation processes in the design processes progressed differently. Ecrin Akkaya's process is seen in the first diagram. Ecrin Akkaya researched design thinking with sketches and reinterpreted the city and its inhabitants. She approached this process with a focus on fiction and built all her fragments as comics with the help of sketches and digital models. The design process has progressed in parallel with the final product. The weekly fragments she created formed the graphic novel she made in the final. The second process analysis diagram belongs to Cansu Çelik. Cansu Çelik carried out the research process primarily by creating collages and illustrations, redesigned life on a vertical axis with a speculative point of view around a story, together with a more architectural perspective. Unlike Ecrin Akkaya, Cansu Çelik re-presented the narrative drawings she carried from 2D to 3D as animated visuals (video/gif). While Ecrin Akkaya's design process developed

a character, the character's emotions and the character's view of the city, Cansu Çelik focused on life and actions.

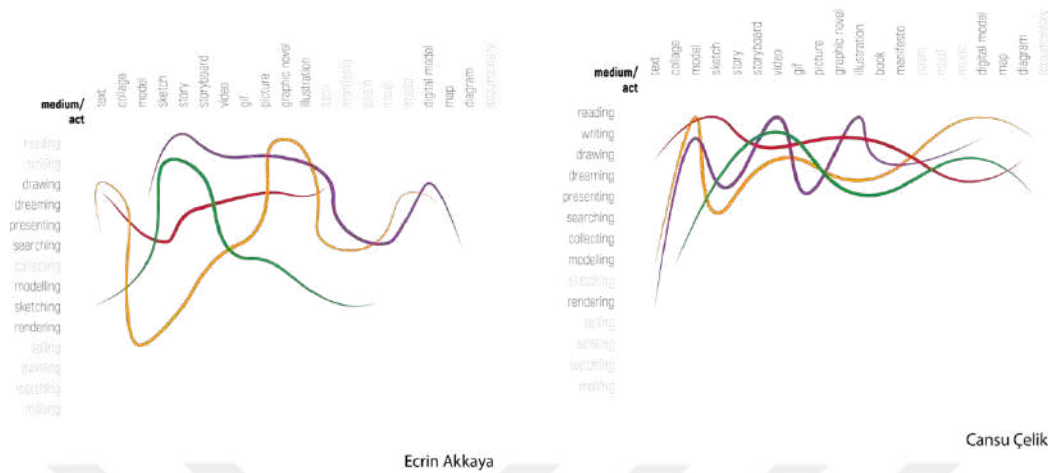


Figure 3.21 The Process Analysis of Ecrin Akkaya & Cansu Çelik.

As the first term of the studio, this is the student's first encounter with a non-limiting theme and use of media. Under the theme 'A Fiction for Life', the meanings of fragment, aphorism, connotation, fiction and narrative were analysed and discussed. The students were given various sources to interpret these concepts differently and find their aphorisms: films, cartoons, children's books and articles. Although different approaches and narratives emerged from each group during this period with four different studio instructors, most of the students, as a result of all these readings, viewings and discussions in the studio, have turned towards 'storytelling' from the first meaning that each of them evokes while interpreting the concepts. They used illustrated characters and speech bubbles to express their design ideas in this context. The fact that the term was predominantly composed of 2nd-year students brought along this follow-up interaction.

In the first term, the theme of 'fiction for life' was handled, in the second term, 'togetherness' was interpreted. The students interpreted the theme differently and produced their design ideas differently. As seen in the process analysis diagrams of Aysu Haşimoğlu and Dorukan Dündar in Figure 3.22, Aysu Haşimoğlu carried out the research, production, interpretation, and representation processes on different planes in various environments. At the same time, Dorukan Dündar produced his design directly within the comics environment. Both students looked at the future with today's design tools and produced speculative architectural scenarios by addressing the

problems of life together with similar approaches. While telling her story, Aysu Haşimoğlu used various media tools and supported the design idea with aphorisms. Dorukan Dündar, on the other hand, created his comic book based on a character. He developed the process with the fragments he created in four chapters, including the ‘destruction | rebirth | rise | settlement’. Both students strongly established the imagination-image relationship and represented the imagined, alternative future, unbuilt and utopian with narrative drawing.

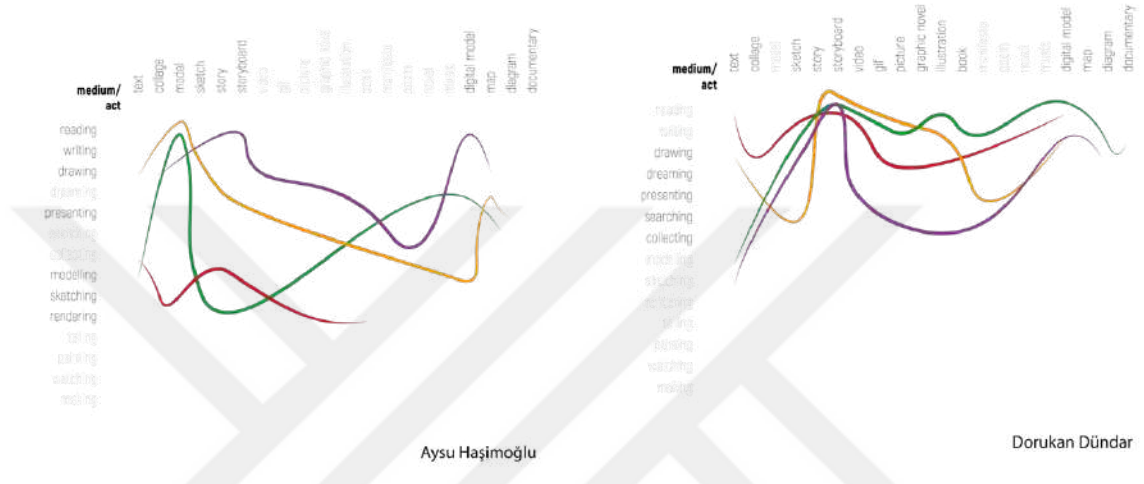


Figure 3.22 The Process Analysis of Aysu Haşimoğlu & Dorukan Dündar.

Unlike the other terms of Studio Altı | Üstü, a competition set was introduced in the third term. The design process of this term developed in three stages, and the aim was to represent the design proposal with a limited digital canvas in each of them. Unlike other terms, a brief was presented to the students, who were expected to comply. The process analysis diagram in Figure 3.22 reflects a section from the process of İrem Kekilli's 3rd competition proposal. While İrem Kekilli's representation process was limited to a text and image originating from the competition, her works were realized through various actions in various environments such as model, collage, story, and illustration during the four weeks (four weeks for each competition) she prepared for this competition. Reinterpreting a skyscraper, the student developed variations on digital models.

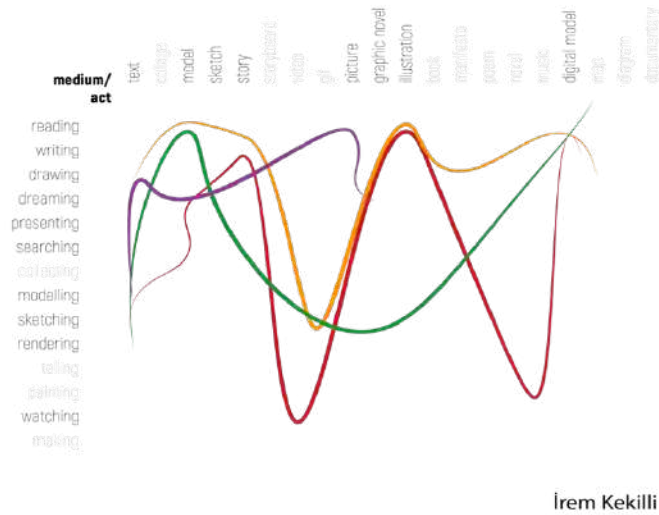


Figure 3.23 The Process Analysis of İrem Kekilli.

The fact that this term progressed through the competition generated a set of rules that did not fit the character of Studio Altı | Üstü to continue the design process. This process is different from the regular functioning of Studio Altı | Üstü, but it has added new concepts and approaches to the studio. As an example, the colour palette limitation given in the competition was tried in the following periods and revealed an aspect triggering creativity. At each stage of the three-phase competition, most students were successful enough to win a prize. Telling a story or producing narratives were consistent, allowing the audience to follow. Studio Altı | Üstü's visible success in this competition series is due to the fact that each layout told a story together and separately.

The process analysis diagrams of two students who set out by imagining a submerged world in the term working with the theme of 'Post-disaster Human Settlements', the 4th term of Studio Altı | Üstü, are shown in Figure 3.24. The disaster scenarios they set out while creating their narratives were the same. However, the research, production, interpretation, and representation processes were different. In this process, students were expected to:

- Create a disaster fiction
- Re-interpret the post-disaster life together and represent it with media and narrative.

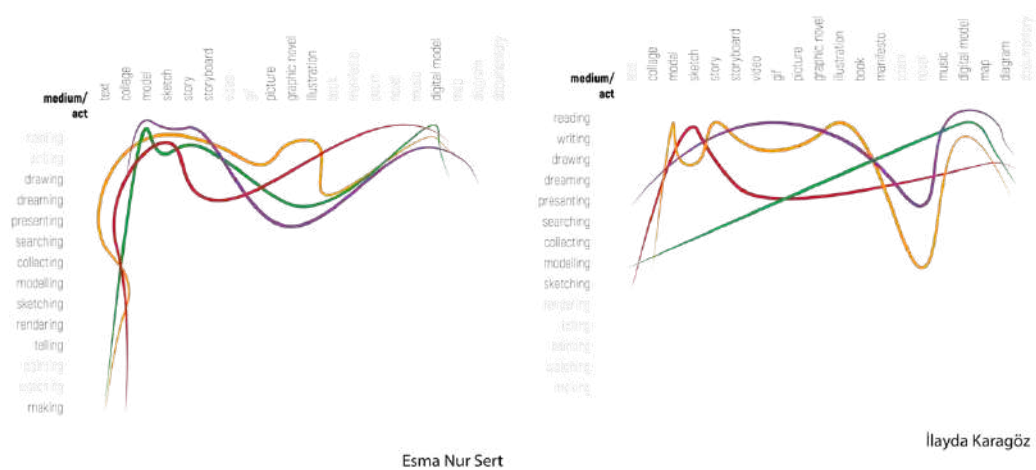


Figure 3.24 The Process Analysis of Esma Nur Sert & İlayda Karagöz.

Esma Nur Sert started the design process by researching and following Neri Oxman's work and imitating her technical modelling trends. Simultaneously, she created a storyboard with her sketches; while the story continued, the reinterpretation and representation of a flooded city were carried out simultaneously. She did these with digital models and physical mock-ups. İlayda, on the other hand, started the same fiction by researching flooded cities around the world; The starting point of the original design was the 'toy dinosaur that swells when thrown into the water'. After this discovery, she started to re-interpret the urban ground through the digital model. Both the production and representation of İlayda Karagöz have developed through digital models and collage illustrations.

During this period, the studio was divided into three different groups, ran by three different tutors, resulting in three different approaches. While one group started designing concept maps and writing a story, the second group started by producing collages and linear animations directly with the power of line, and the third group developed technological approaches to the theme and participated from a different perspective. As a result, most of the designs in the process have been 'imaginary, unreal' narratives that turned the disaster into an opportunity and supported coexistence instead of providing solutions which prevent disasters. In this term, exchange students from other countries were also involved; for them, it was a challenging experience to be in a different country, a different school, and a studio outside the known architectural studios. However, since the discussion was about

‘Natural and Human Disasters’, the common problem of the whole world, it was easier for them to get involved in the theme. Furthermore, as this was the first term after the pandemic, the use of media, predominantly digital in the previous terms, was enriched with models and sketches.

The process analysis diagrams of two different studies carried out in the 5th term of the studio are shown in Figure 3.25. The expectations from each student during the twelve weeks were as follows:

- Focusing on emotions first, representing emotions on an A4 paper,
- To narrate this representation with literary media tools,
- Reproducing with installation as a physical narrative form and digitally constructing the spaces of this installation together with emotions in the immaterial universe,
- Finally, to design architecturally all these fictions and dreams in a physical world.

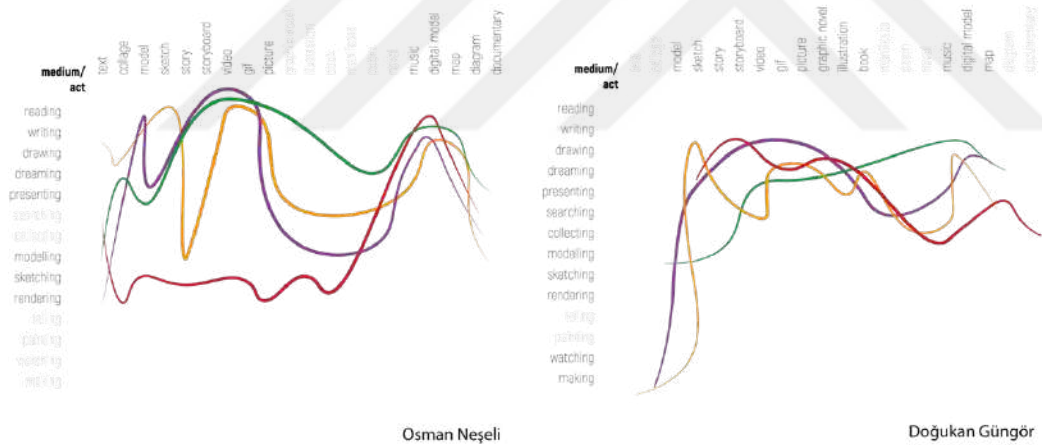


Figure 3.25 The Process Analysis of Doğukan Güngör & Osman Neşeli.

While Osman Neşeli started the research process with digital modeling, Doğukan Güngör started by narrating what he dreamed of. Osman Neşeli progressed through digital modeling and maps in the ongoing process, and his productions and representations were created as videos and gifs. He integrated the game he built in the immaterial universe into a physical world. On the other side, Doğukan Güngör chose to design his story on a threshold ‘neither in the immaterial universe nor in the physical world’. His production has appeared as collages and graphic novels; his story and the

location he chose were central to his design. Although these design processes have similar media outputs as shown in Figure 3.25, the research and reinterpretation processes have developed quite differently.

The sculpture and Blender animation workshops held in this period pushed the students to create 3D modelling and moving narratives. The students, who reproduced their emotion maps first with installation and then with Blender, carried out the design process with modelling act and motion visualisation media. In this process, the fact that the majority of the students were in the fourth and third year was effective in the development of their skills in using modelling software.

The process analysis diagrams of the 6th term of Studio Altı | Üstü show the studio works that are similar at certain points or completely different. Expectations from students this term were:

- First, to make traditional collage works.
- Afterwards, to create a house fiction/story for rustic life.
- Finally, to create 3D print models of the house fiction.

The aim was to create the conceptual framework of the fiction about rural life through collage and to physically represent the fictions that develop through 3D printing. In the design process, each student handled the stages differently. In the first process analysis diagram, Anıl Tunç started his research, production, interpretation, and representation actions in the same way as the other students in the studio and ended the production process with a manifesto. Approaching from a different perspective, the student tried to produce and develop rustic life fiction in different environments but advanced the process with the manifesto's focus. In his design process, the line was formed as a narrative in the writing environment. By approaching the studio theme with an argumentative point of view, he rejected the home's belonging to a place or something and emphasized the concept of the boundary. His map, digital model and physical model is the 'A House Manifesto', representing the fiction and criticism in his mind.

The process analysis diagram of Aykut Nesne, who interprets rustic life from a critical point of view like Anıl Tunç, can be seen in Figure 3.26. He started his design

research by writing a story, then created the fragments of the story he wrote and continued with the visuals. His production was about reconstructing a village life from a sociocultural perspective. First, he built his village house, which he designed by accepting books as the ‘fundamental building blocks of the house’. Then, he reinterpreted the story he wrote and developed the house as a digital model. Its representation is formed by presenting the fragments it has created based on the story as a collage, illustration, or gif.

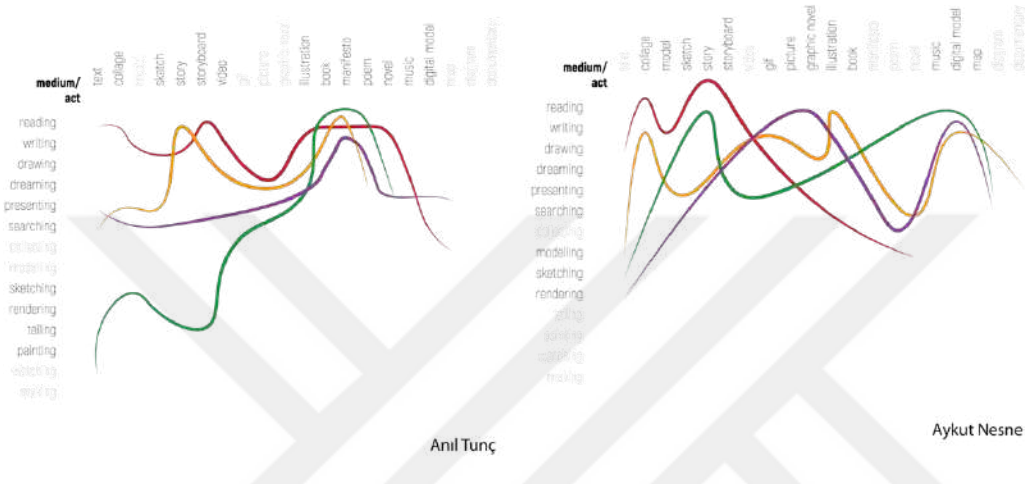


Figure 3.26 The Process Analysis of Anıl Tunç & Aykut Nesne.

The process analysis diagrams of Şeyma Özkoçak and Gökçe Başak Şahin can be seen in Figure 3.27. As mentioned in the previous chapter, the approach of both students were in the same direction. They worked on improving/treating rustic life's deficient/wornout/incomplete aspects. Although the final products are similar, the design processes were very different. Şeyma Özkoçak has done her research by producing images, videos, and collages over images; Gökçe Başak Şahin, on the other hand, proceeded with a more literary research method. She developed his fiction with aphorisms by reading articles and poems about the current rural life. Şeyma Özkoçak reinterpreted the concept of the village by modelling an existing village. In this sense, its design can be defined as a reproduction. Gökçe Başak Şahin has developed the village interpretation mainly through illustrations and graphic maps.

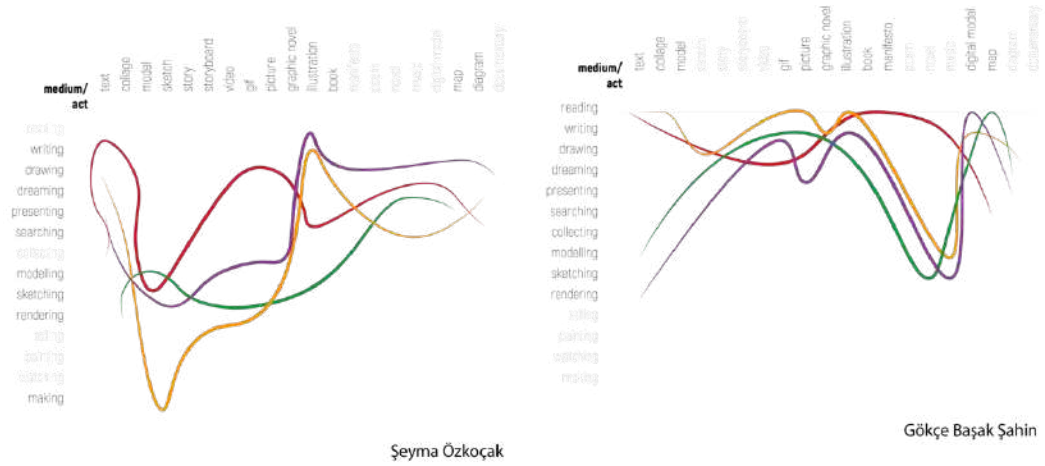


Figure 3.27 The Process Analysis of Şeyma Özkoçak & Gökçe Başak Şahin.

Asu conducted design research with diagrams of the story and the house. When the process analysis diagram is examined (Figure 3.28), it is seen that her production progresses through models and gifs/videos. While reinterpreting the interior-exterior relationship of a village house, she focused on the movement of the fixed building elements of the house. She represented this movement as a gif/video over animated visual.

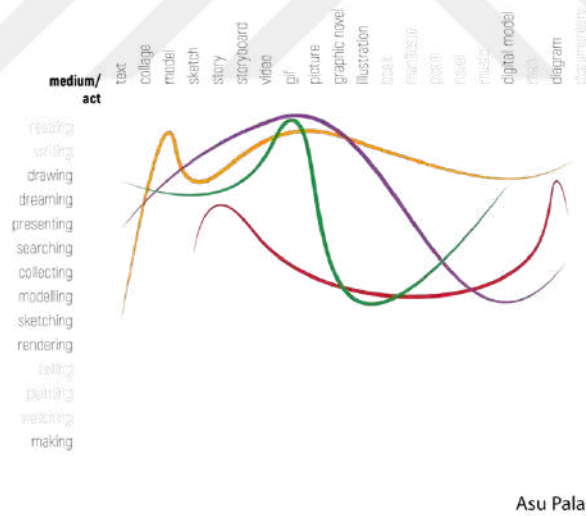


Figure 3.28 The Process Analysis of Asu Pala.

In the sixth term, the last Studio Altı | Üstü term in which the author participating, a trip was organised for the students to Pazar Köy in Ankara to familiarise them with 'Rustic Life'. During the trip, the students encountered long narrow roads, hills, demolished buildings, and empty squares. Under the influence of the experience of this trip, Şeyma Özkoçak, Gökçe Başak Şahin and a few other students focused on the

missing and challenging aspects of rural life and developed narratives for the improvement and functionalisation.

All these process analysis diagrams show that Studio Altı | Üstü, only through narrative act and media and a meta-theme, without giving a direct roadmap/brief to students, can achieve different interpretations and representations of architecture. This thesis was closely involved in the process of Studio Altı | Üstü, examined the potentials of narrative and narrative drawing developed over the outputs of a six-term process and built the theoretical framework of the studio with its conceptual framework.

The study presented here considers narrative and narrative drawings' variety, diversity, and functions in design learning and how they are related to concepts and transformed during the design process. Studies on design learning are crucial for understanding the design process. Studies on narrative and narrative drawings should be followed to develop a better understanding of the design process. Admittedly, constituent elements of narrative, namely correlated concepts, or design tools, are ambiguous and have various forms and contents. However, this study focuses on aspects of concept implications, such as novel concepts, leading concepts, unsatisfactory concepts, and unique concepts integrated during the design process. The setting of an architectural design studio was used as a living laboratory, and an experienced medium was set for collecting self-reports of students as objective data. This study analyses narrative act and narrative drawings in design learning with process analysis diagrams. As the studio is a process oriented and is an experiential studio rather than a result oriented one, process analysis diagrams are of essential value. All these process analysis diagrams show:

- Studio Altı | Üstü is an architectural design studio that encourages creative learning and teaching approaches through narrative and media, allowing for different interpretations and representations of architecture.
- Studio Altı | Üstü's methodology is not to ask questions and produce answers but to re-produce the question each time.
- The student writes the rules of this design process and therefore re-produces in an unrestricted design environment.

- Different narratives can be created around the same theme as the fragments, which can be represented differently with multimedia.
- The act of understanding and transmitting architecture do not have to be realized with a specific production and representative environment; a design idea can be created without traditional representation and design methods.
- The repeatability of correlated concepts increases the intellectual quality of the design process; it allows for the formation of different encounters and perspectives.

To conclude, this thesis does not impose or suggest a teaching model but presents a framework and a study of trends and possibilities based on various pedagogical experiments, practices, and architectural positions. This work helps rethink educational strategies and practices. It critically reviews past experiences, recent experiments, and current insights and feedback from studio trainers, educators, and design researchers to understand and develop new approaches, studio models and practices. Figures demonstrate that it is possible to follow a connection with narrative acts, medium and correlated concepts in the design process, and they can have certain patterns.



4. CONCLUSION

In line with previous research and studies on architectural design studios and learning environment and given the changing world, generation and technology, architectural design learning has degenerated in many ways. Each design studio is unique in terms of their learning environment. This uniqueness makes the design studio an entity in its own right, with guidelines followed within its institution. Whilst the design studio as a learning environment has unique characteristics, unlike other educational spaces where learning is unidirectional, some degenerations need to be addressed. Some of these degenerations are:

- Students' lack of interest in the architectural design studio.
- Failure of the studio environment to become an environment where the student can experience architecture.
- Disconnection and confusion between the intellectual and practical parts of the design.
- Not going beyond traditional architectural representation tools so that the student is not directed to work with sufficient and various media to represent design thinking; having to conduct a design studio through a single subject and specific tools.
- Providing specific resources and subjects, thus causing the student to think only vertically.

This thesis proposes a new intellectual and practical design approach in the context of Studio Altı | Üstü. In this context, it affirms and discusses the narrative act as a design tool and method and narrative drawing as a design object as an alternative pedagogical approach in the architectural design studio. Founded with the aim of approaching architecture and architectural education from a different perspective,

Studio Altı | Üstü addresses the construct of architectural thinking and considers narrative as one of the ways to construct architectural design thinking.

In Studio Altı | Üstü, images are written, words are penned, and stories and material expressions intersect in the line of a narrative drawing. Narrative drawing is a narrative act through which architects can translate their speculations about future architecture into representations. In this sense, the production and reading of architectural thought as a narrative in Studio Altı | Üstü through narrative drawing and the related concepts of production, research, interpretation and representation are discussed and evaluated as an alternative studio practice.

While presenting a new perspective and critique of the architectural environment in the context of studio practice, this thesis draws on the narrative that is the output of Studio Altı | Üstü. The concept of narrative action, defined as fragments of design thinking, discourse and a way of thinking, has been explored in the studio, offering new avenues for students and studio facilitators. Besides emphasising narrative acts and narrative drawing, one of the studio's aims is to strengthen the link between the act of thinking and making and the imagination - the image. Considering the conceptual framework and studio examples, it is possible to say that narrative acts are an alternative learning and design approach for the architectural design studio. In contrast, the narrative is a studio output through narrative act, narrative drawings and fragments. In this context, it is possible to summarise these agents as follows:

- **Act is an agent of narrative.** It includes all lateral design actions such as thinking, producing, making, destroying, designing, imitating, telling, imagining, presenting, and reading. In this context, the narrative act can create different outputs in the same environment as an environment for thinking, discussing and designing together. The narrative is experimental, formed by combining different actions in the studio environment and creating diversity. As seen in the process analysis diagrams, the intersection of different actions with different media in Studio Altı | Üstü and the combinations that can emerge with these intersections make each student's identity in the studio different. In addition, the diversity of actions differentiates the studio outputs, i.e. the narrative, each term, creating an experimental and spontaneous environment for the instructors and students.

- **Line is an agent of narrative.** The narrative carries all the energy of the line/drawing. Like a line, it has a starting point, and its ending point can constantly change; it is always incomplete. It is not in a single dimension; it is multi-dimensional and multi-layered. A narrative, like a line, can unite, separate, initiate and finalise

something. The narrative, in both an intellectual and a material sense, initiates, develops, destroys and remakes the design in Studio Altı | Üstü. As Orsini says: “For me, architecture—whether a built project, a drawing, or a model—is always an exploration: when we finish a project, we continue to explore” (Orsini, 2023). Therefore, all studio outputs are incomplete and drawn with original fiction in different dimensions, each bearing a new exploration.

- **Fragment is an agent of narrative.** Designing is also an act of trial and error. In this context, the evolution of design thinking in architectural design studio practice needs parts, integrations, and reorganisation of parts. The fragments produced can be considered a piece of the narrative or itself. These fragments contain all the questions asked during the design process, the answers to these questions and the discoveries. The fragments of the whole are not an architectural project but a narrative. They are full of differences that can be organised, restructured, connected, and changed in a way that aims to re-evaluate all kinds of things considered. The different associations of the fragments allow design thinking to be comprehended, re-examined, and re-evaluated critically and creatively, uncovering hidden alternatives by constructing new relationships between reality and fiction.
- **Narrative is a process** because it is discursive, dynamic, unfinished and fragmentary. It is not an expression of an outcome or a final product but a representation of the process. The concept of repetition is crucial for defining narrative. The act of repetition continuously transforms design thinking over time. Interrelated concepts emphasise this transformation; it is a narrative process, and the repetition of concepts/actions in this process reveals design thinking.

As advocated by the thesis, the studio environment, where is no limit to thinking, imagining, and designing, is the most appropriate place for transferring architectural thought with a narrative sequence. In this context, Studio Altı | Üstü is both the research object and the setting for this thesis. This thesis acknowledges the narrative as the process and output of the studio. It defines narrative drawing, which emerges through multimedia and the relationship between line and narrative, as the media tool of this approach. Studio Altı | Üstü expresses the relationship between thinking-making and imagination-image with intellectually profound aphorisms and visual fragments by making narrative and architecture a more open and exploratory field. It enables us to look at architectural education from a more unrestrained, innovative, and unlimited perspective.

To conclude, Studio Altı | Üstü is an example of the approach of this practice in the educational context. It is a studio which aims not to produce architectural products but to create and visualize architectural design thinking and was an experiment with an undefined path and unpredictable outcomes, which could have been applied differently. In Studio Altı | Üstü, “The designer imagines what is not yet, projects what has not been and speculates upon the future that has not been realized” (Bancı, 2022). As Coates said, “If you want that bit extra in a digital age where every form can be achieved, and every world simulated, the narrative provides architects with an additional tool drawn from the rich and wonderful world of human nature” (Coates, 2012, p. 263). However, the more narrative and narrative drawing practices are studied, the more experiments that require a theoretical perspective are carried out, the more defined concepts related to it become and comprehended in various projections and under theoretical bases, and the more it is integrated with today’s progressive values, and qualities, narrative and narrative drawing practices could make more potent and more provocative impacts and stimulate more diverse discussions for the architectural learning environment.

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APPENDICES

Figure Appendix. 1: Narratives Belonging to the Case 1, Ecrin Akkaya.

Figure Appendix. 2: Narratives Belonging to the Case 2, Cansu Çelik.

Figure Appendix. 3: Narratives Belonging to the Case 3, Fevzi Dorukan Dündar.

Figure Appendix. 4: Narratives Belonging to the Case 4, Aysu Haşimoğlu.

Figure Appendix. 5: Narratives Belonging to the Case 5, İrem Kekilli.

Figure Appendix. 6: Narratives Belonging to the Case 6, Esmâ Nur Sert.

Figure Appendix. 7: Narratives Belonging to the Case 7, İlayda Karagöz.

Figure Appendix. 8: Narratives Belonging to the Case 8, Doğukan Güngör.

Figure Appendix. 9: Narratives Belonging to the Case 9, Osman Neşeli.

Figure Appendix. 10: Narratives Belonging to the Case 10, Aykut Nesne.

Figure Appendix. 11: Narratives Belonging to the Case 11, Anıl Tunç

Figure Appendix. 12: Narratives Belonging to the Case 12, Gökçe Başak Şahin.

Figure Appendix. 13: Narratives Belonging to the Case 13, Şeyma Özkoçak.

Figure Appendix. 14: Narratives Belonging to the Case 14, Asu Pala.

Figure Appendix. 15: Studio Altı | Üstü's Narratives for Six Terms.

Figure Appendix. 16: Studio Altı | Üstü's Narratives for Six Terms.

Figure Appendix. 17: Studio Altı | Üstü's Bibliography, 2020-2021 Fall Term.

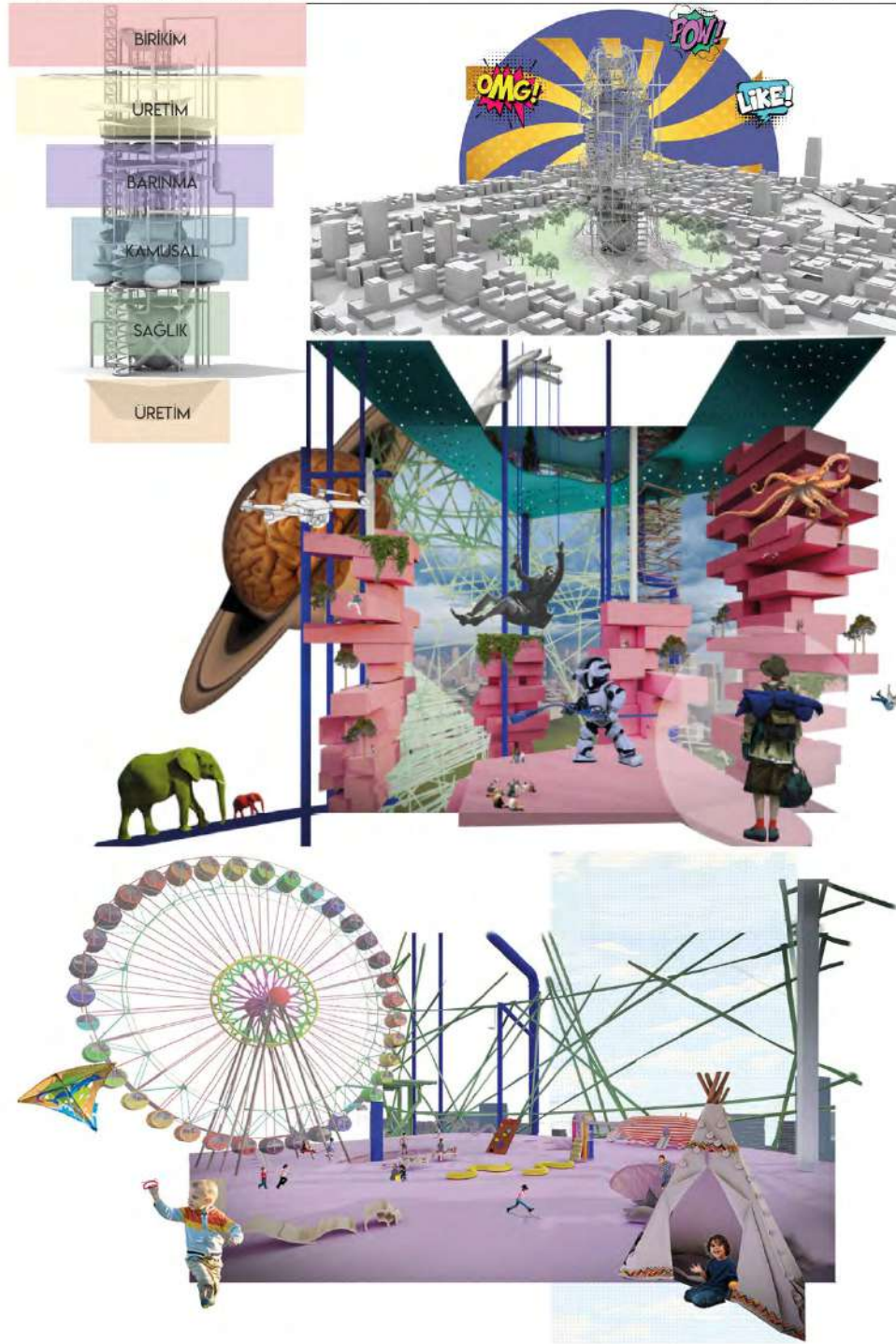


Figure Appendix. 2 Narratives Belonging to the Case 2, Cansu Çelik.

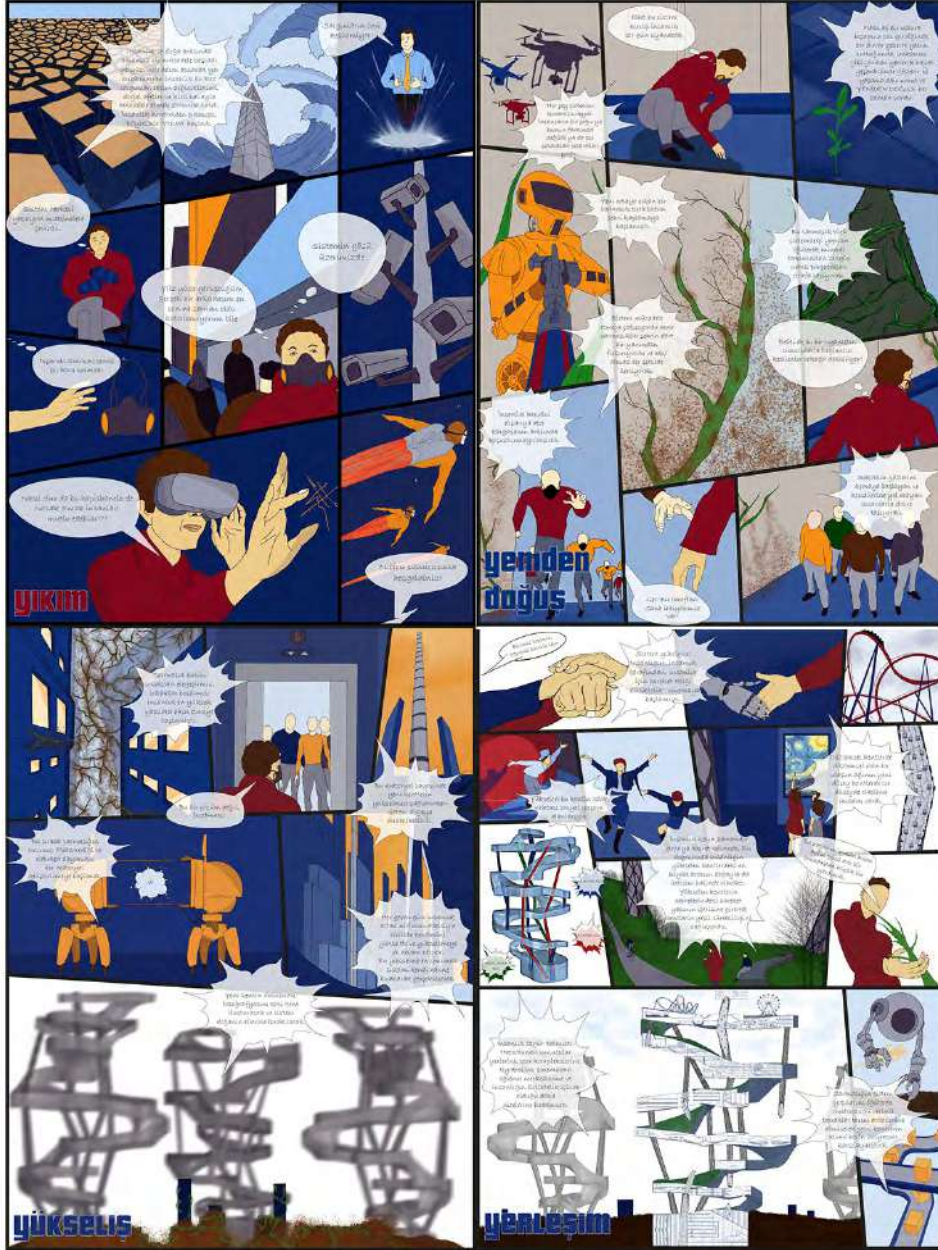


Figure Appendix. 3 Narratives Belonging to the Case 3, Fevzi Dorukan Dündar.

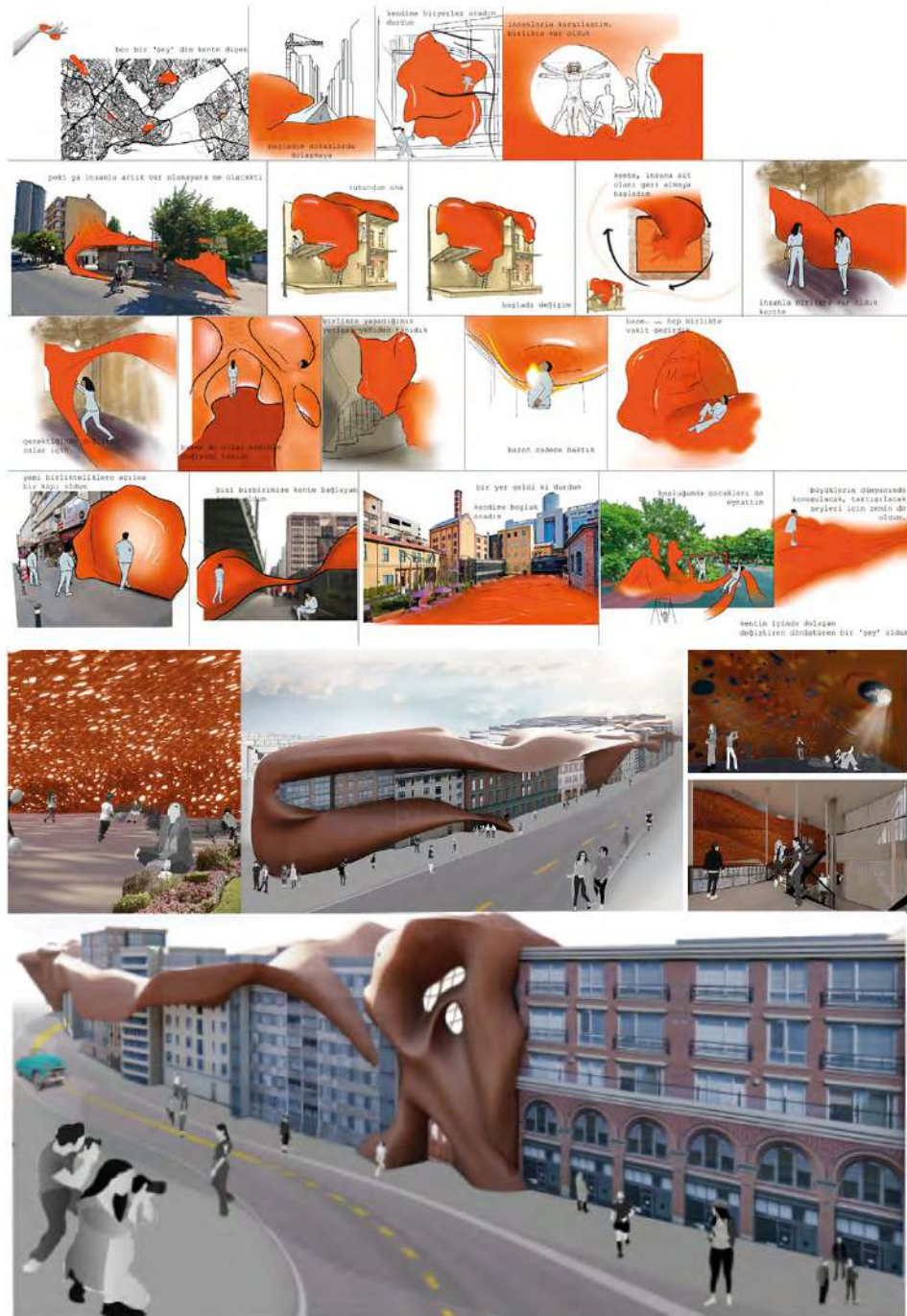


Figure Appendix. 4 Narratives Belonging to the Case 4, Aysu Haşimoğlu.

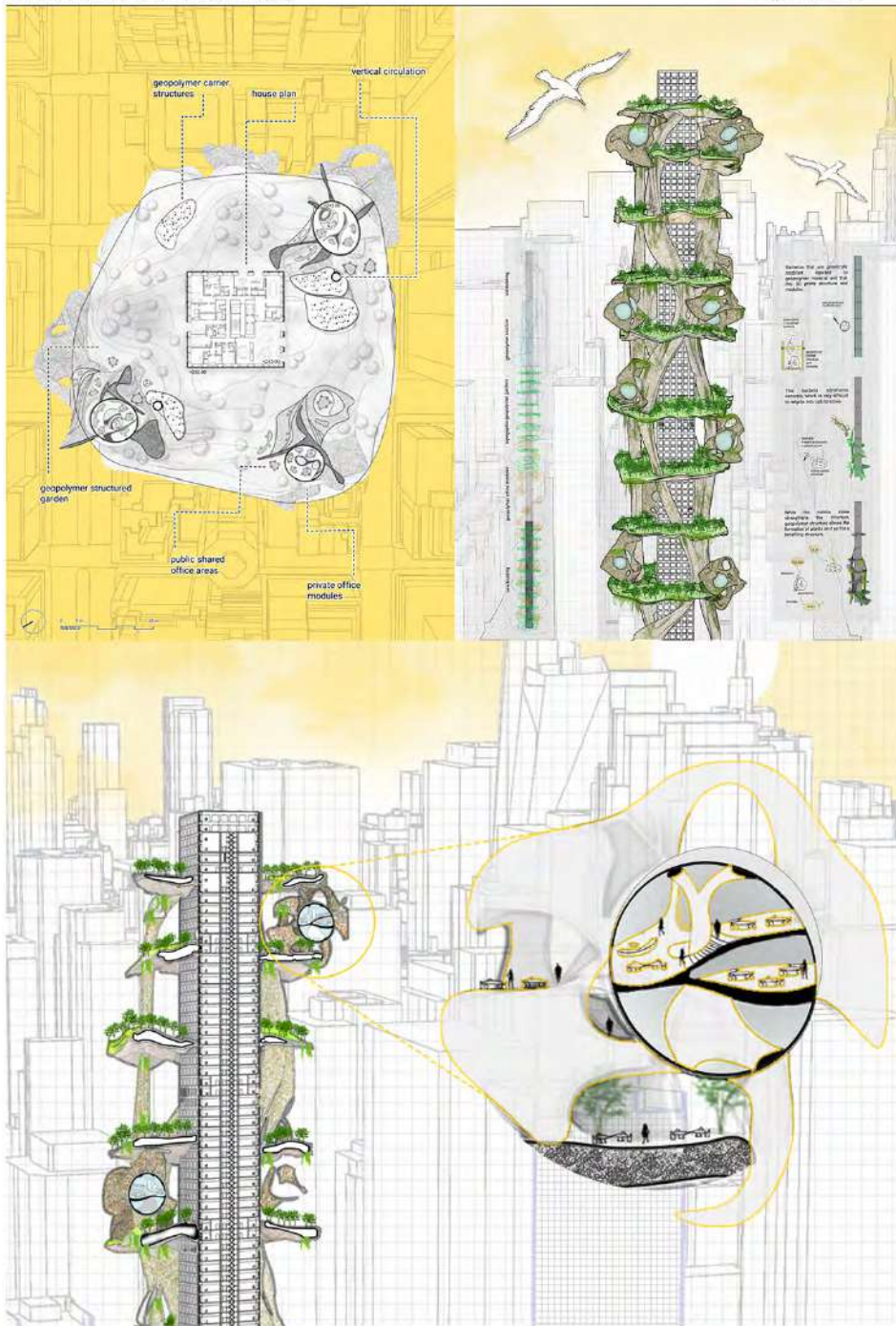


Figure Appendix. 5 Narratives Belonging to the Case 5, İrem Kekilli.

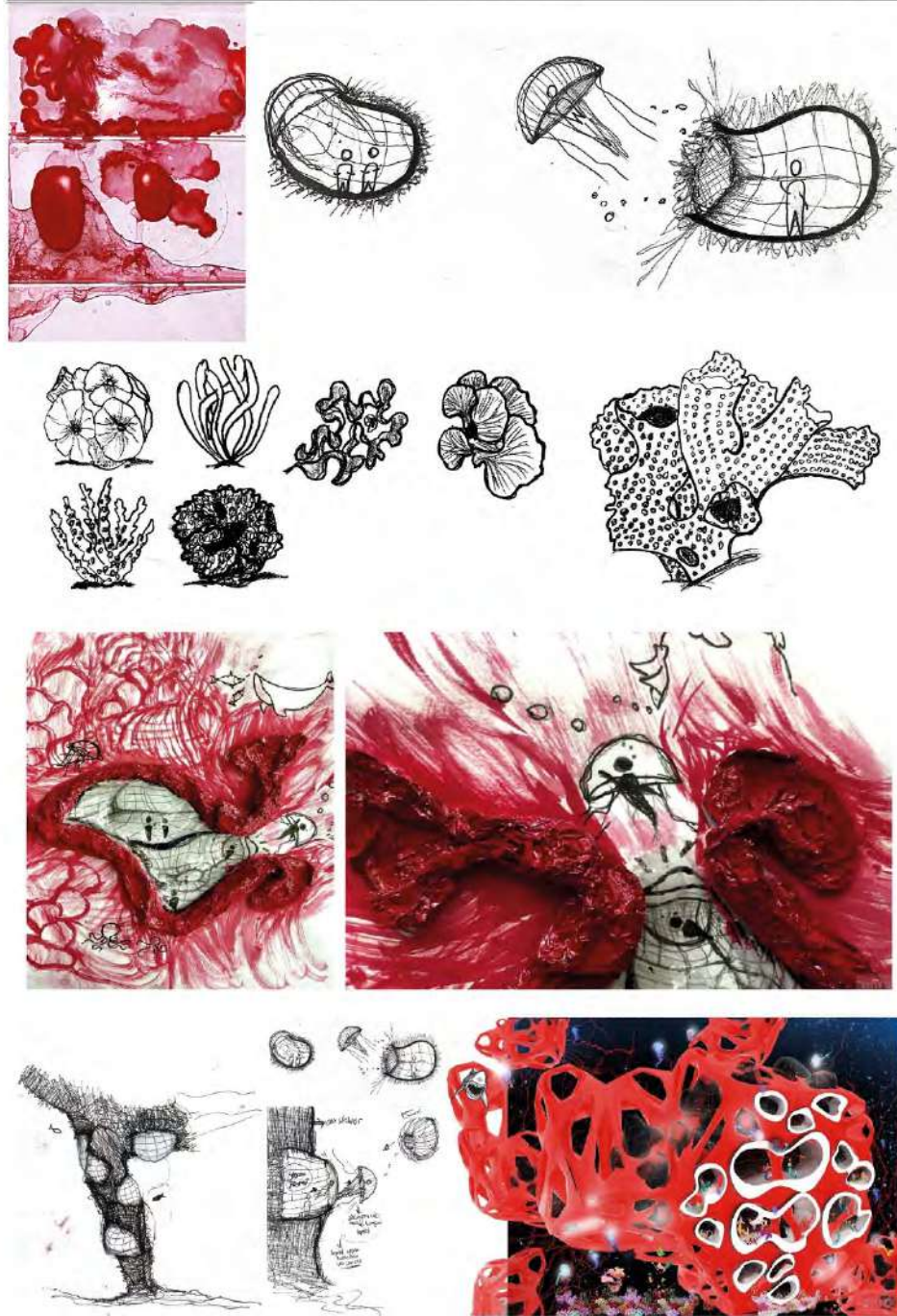


Figure Appendix. 6 Narratives Belonging to the Case 6, Esma Nur Sert.

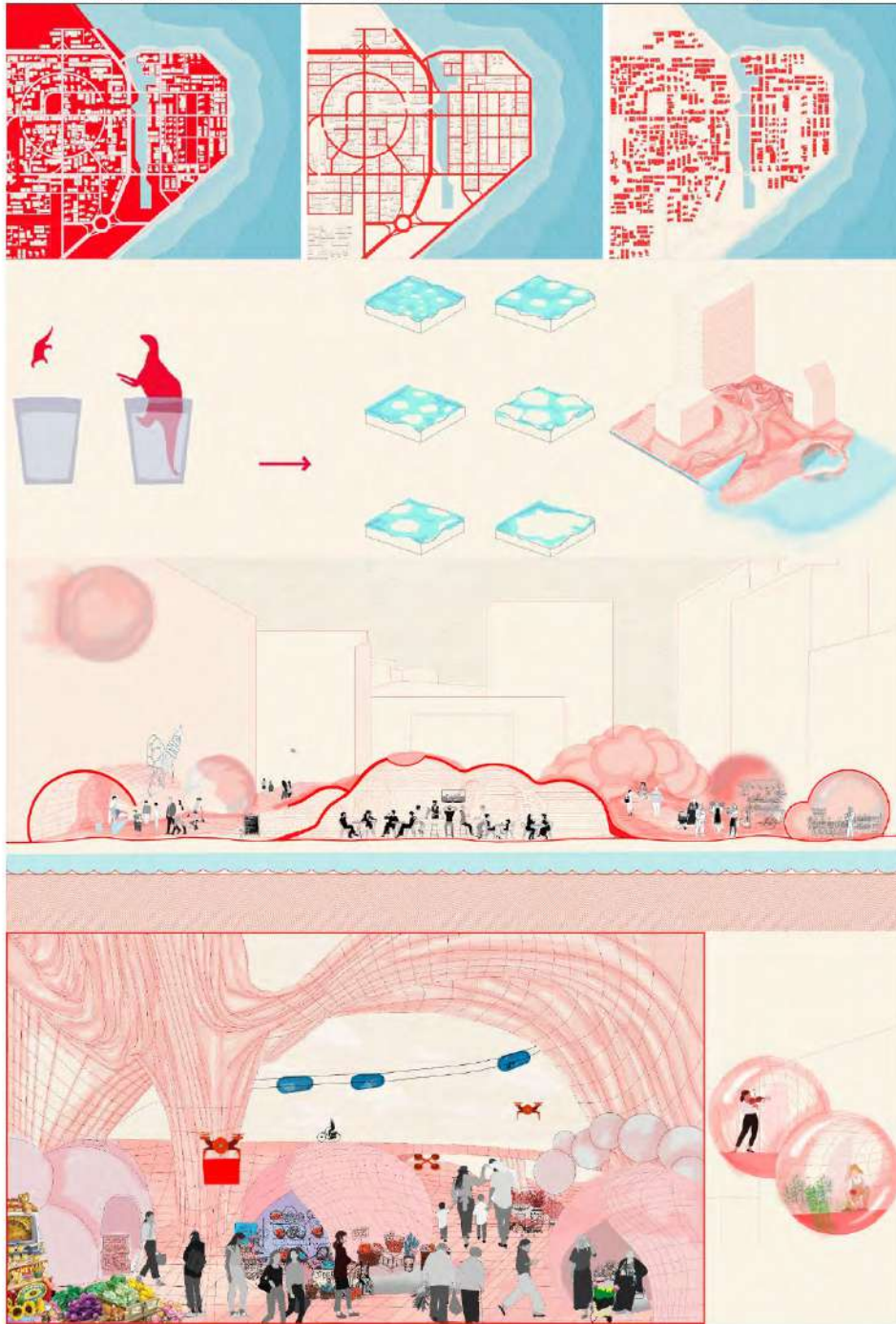


Figure Appendix. 7 Narratives Belonging to the Case 7, İlayda Karagöz.

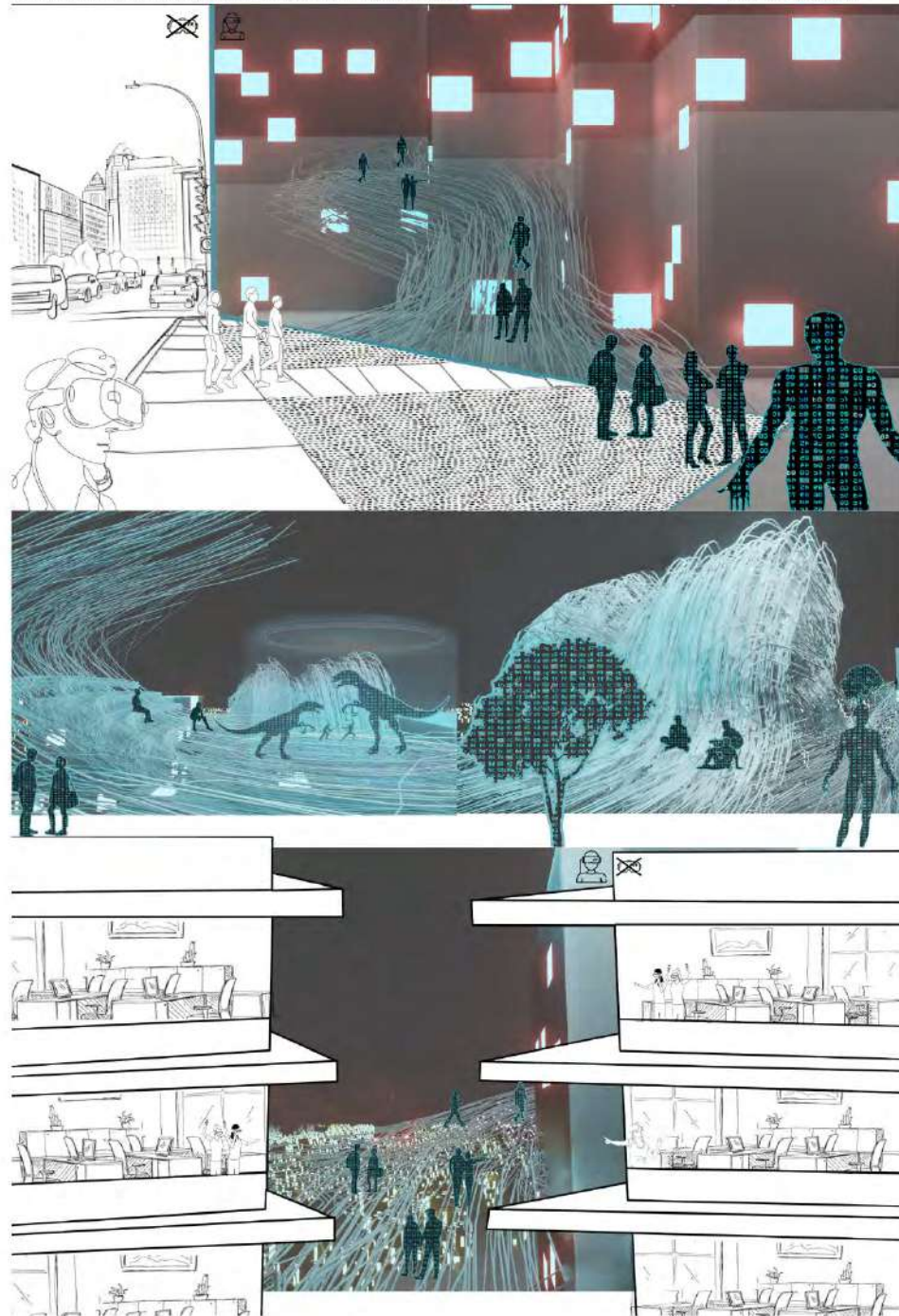


Figure Appendix. 8 Narratives Belonging to the Case 8, Doğukan Güngör.

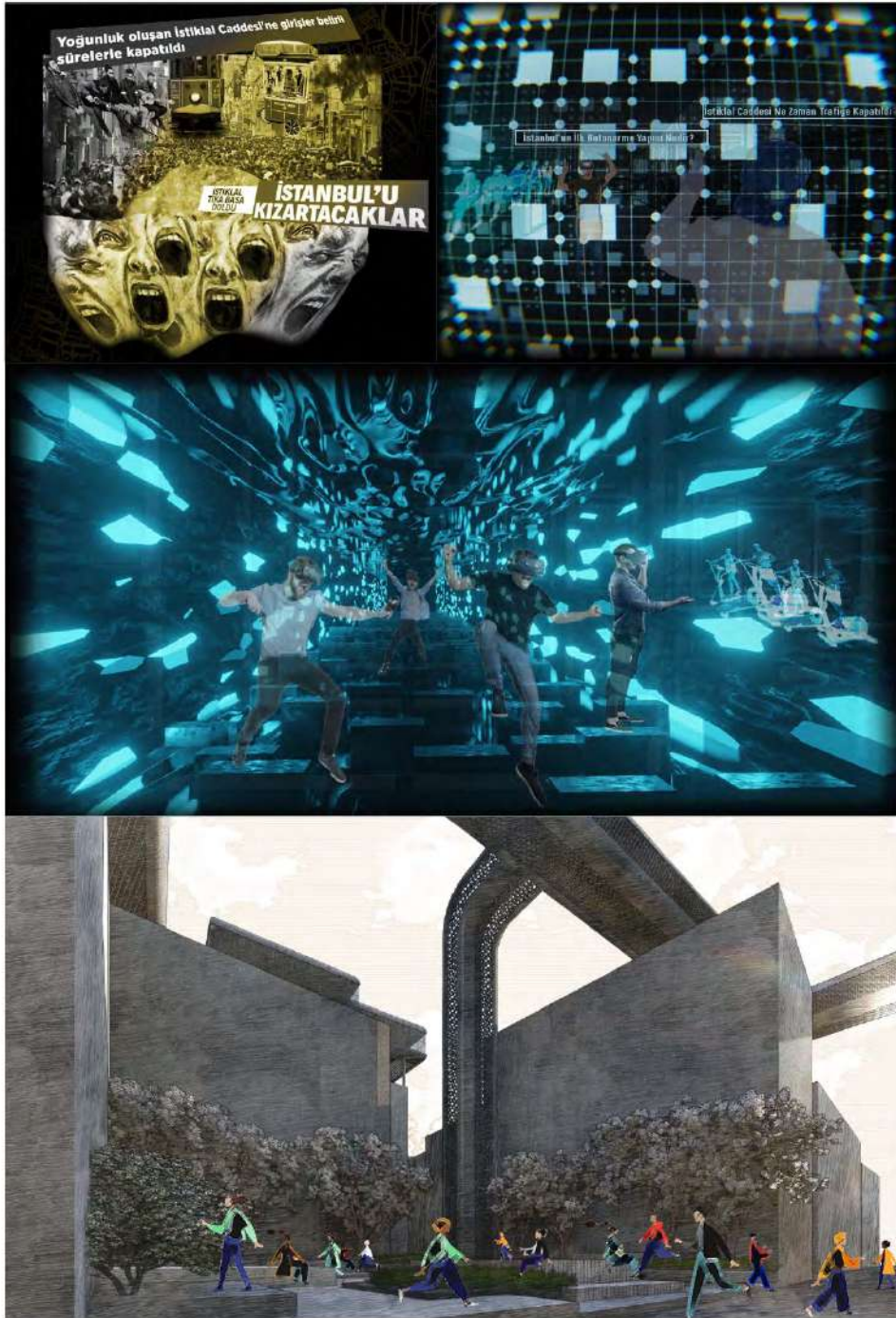


Figure Appendix. 9 Narratives Belonging to the Case 9, Osman Neşeli.



Figure Appendix. 10 Narratives Belonging to the Case 10, Aykut Nesne.

Tüm dünya evin içinde, peki "ev" nerede?

Ev havada asılı duran bir kutudur, kesintisiz her yeri pencereyle delik deşik edilmiştir. Kutu çayırların ortasındadır, bahçeye hakimdir. Manzarayı öyle bir keser ki evin önü, arkası, yanı diye bir şey kalmaz. Doğanın içinden geçmesine izin verir onu sınırlamaz.

Yer diye bir şey yoktur. Önce, sınır ancak onun maskesi olan duvarda bulunabileceği gibi görünür. Ama sonra, bu yeni sınır anlayışı duvarın statüsünü tartışmaya açar. Mesele artık burada mı yoksa şurada mı olduğumuz değil de duvarın bu yüzünde mi yoksa öbür yüzünde mi olduğumuz meselesidir. Fakat bu, bir yanın iç bir yanın dış olduğunu belirtmez.

Evin nerede olduğu sorusu neye/nereye sınırlar koyduğumuzla alakalıdır. Bu ev bazen doğup büyüdüğümüz koy evidir bazen şehirde yüksek katlı bir apartman dairesi. Bazen uyurken hayal kurduğumuz bir yatak bazen bir ağacın altı. Dışarıda yaşanan hayatın evin içinde bir yansıması. Hem yalnız kaldığımız yer hem bir avluda kalabalıklaştığımız. Hem sokağı kucaklayan bir duvar hem ona en mesafeli olan. Hem pencerenin önünden dışarı baktığımız bir tablo hem tablonun üzerine örtüğümüz perde. Hem terk edilmiş hem hasret duyulan. En mahrem en kamusal. En sınırlı en sınırsız. Nerede olduğu bilinmeyen bilinse bile orada olmayan ev...

Ev bu kadar tanımlanamazken ya da pek çok şeyle tanımlanabilirken, sınır dediğimiz şey ne kadar katı olabilir? Bahsettiğimiz sınırlar "dış" dediğimiz yer ile "iç" dediğimiz yer arasında eriyip gider. En ufak rüzgârda kendiliğinden açılan kapılar gibidir bu sınırlar. Nasıl davranacağı belli olmayan muğlak sınırlar...



Figure Appendix. 11 Narratives Belonging to the Case 11, Anıl Tunç

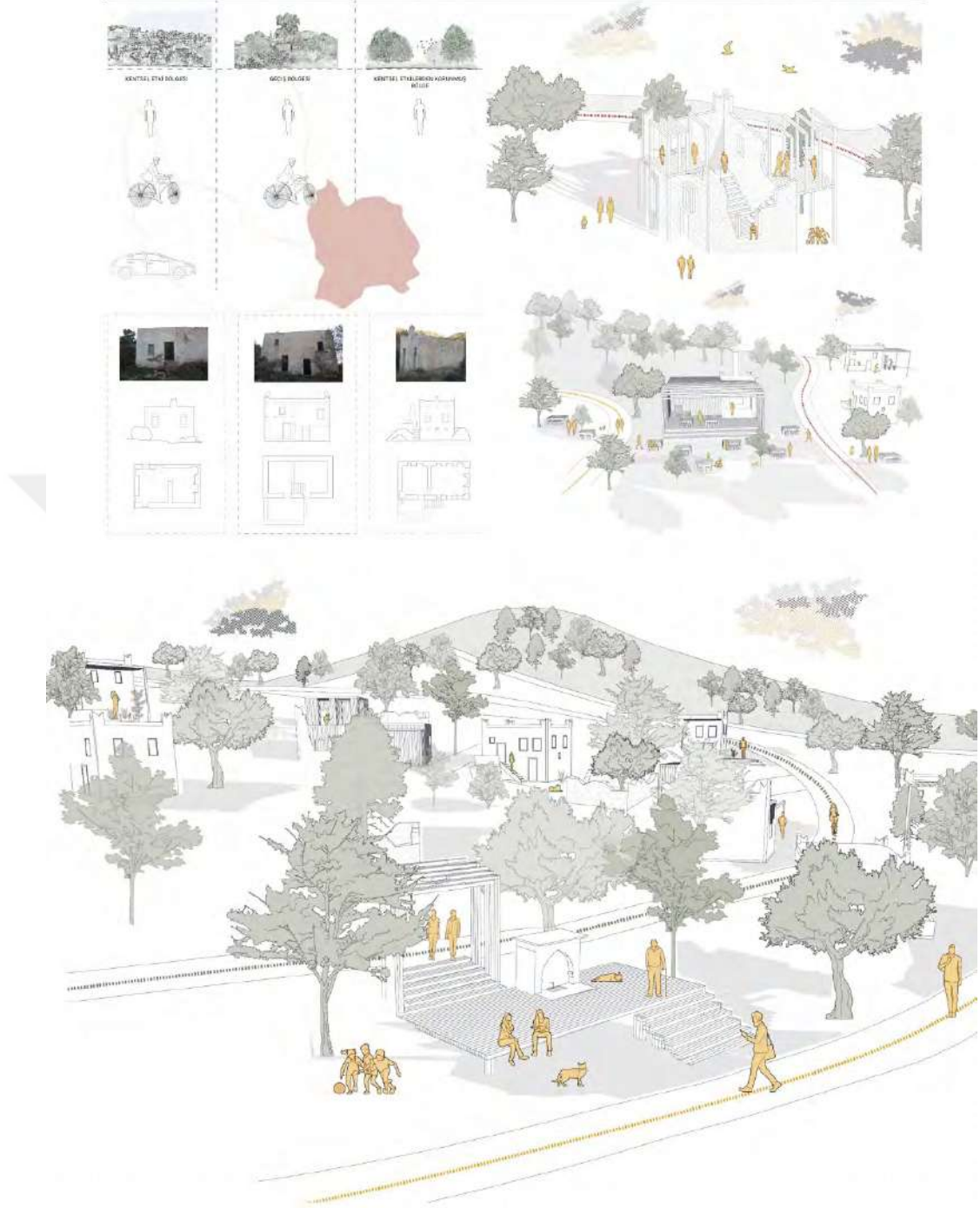


Figure Appendix. 12 Narratives Belonging to the Case 12, Gökçe Başak Şahin.



Figure Appendix. 13 Narratives Belonging to the Case 13, Şeyma Özkoçak.

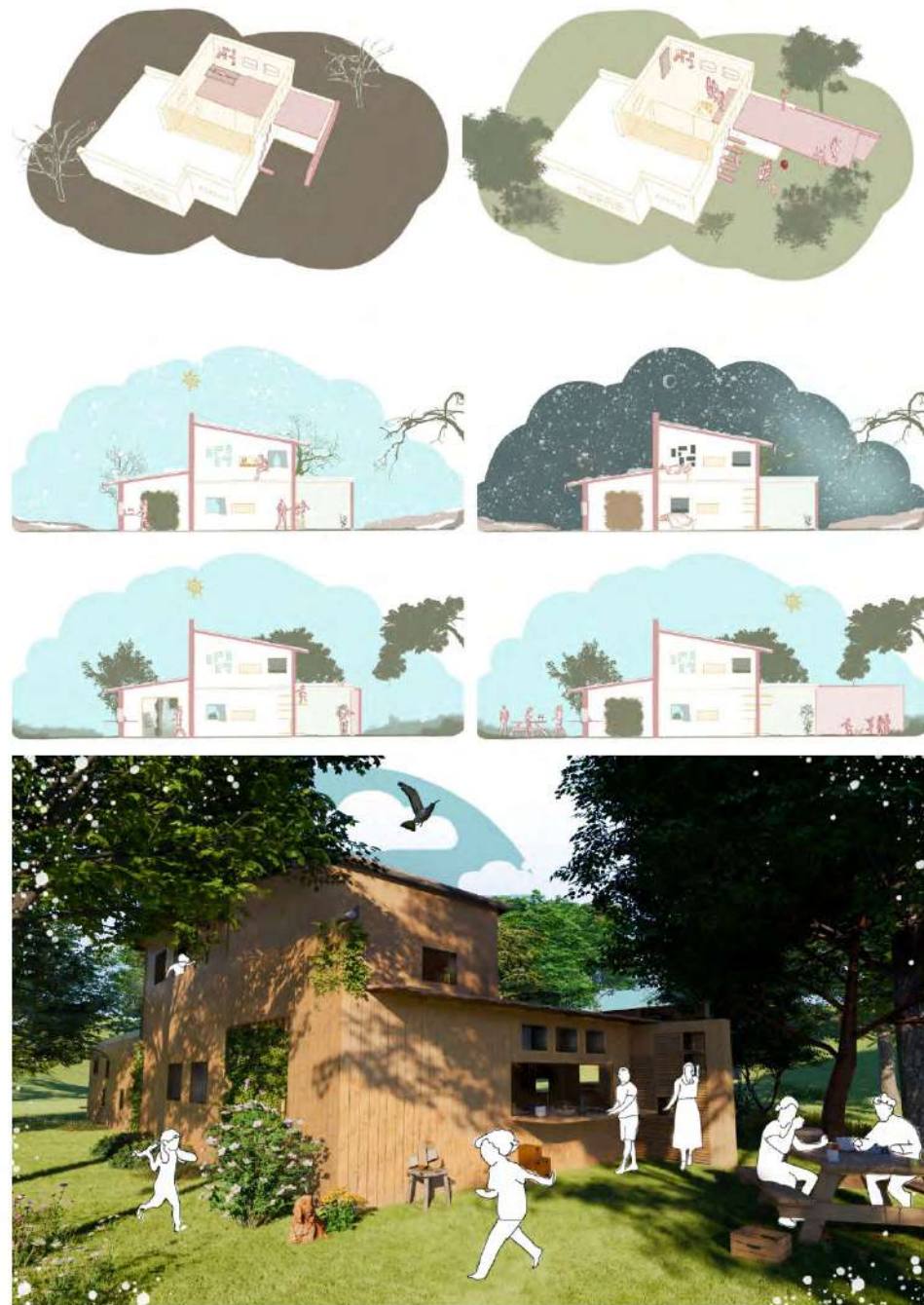


Figure Appendix. 14 Narratives Belonging to the Case 14, Asu Pala.

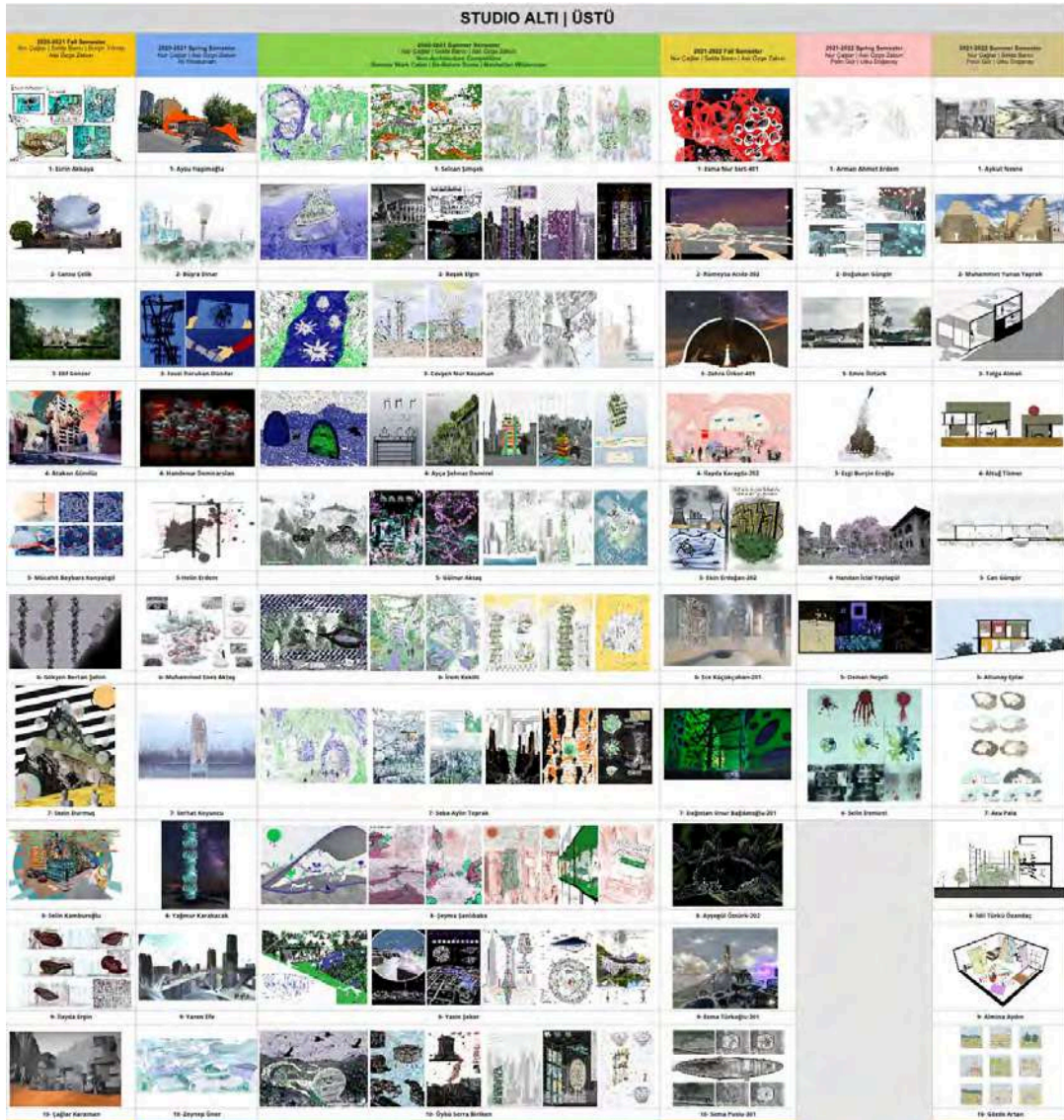


Figure Appendix. 15 Studio Altı | Üstü’s Narratives for Six Terms.



Figure Appendix. 16 Studio Altı | Üstü's Narratives for Six Terms.

*

OKUMALAR | İZLEMELER | ZİYARETLER

ÇİZGİ ROMANLAR

V For Vendetta | 1982-1989 | Alan Moore & David Lloyd & Tony Weare

Watchmen | 1986-1987 | DC Comics

Daytripper | 2010 | Fábio Moon & Gabriel Bá

Habibi | 2011 | Craig Thompson

FİLMLER, ÇİZGİ FİMLER

Metropolis | 1927 | Fritz Lang

Richie Rich | 1950-1982 | Harvey Comics

Jetgiller | 1962-1987 | Joseph Barbera

La Linea-Bay Meraklı | 1971- 1986 | Osvaldo Cavandoli

Out of Afrika | 1985 | Sydney Pollack

YAYINLAR

Lebbeus Woods - The New City, The Storm And The Fall, Terra Nova, Slow Manifesto

Richard Francis Burton, Geraldine Mccaughrean - Binbir Gece Masalları

Philip Reeve - Yürüyen Kentler

Yona Friedman - Imaginary Cities

Paul Auster - New York Üçlemesi - Cam Kent, Hayaletler, Kilitli Oda

Antoine De Saint-Exupery - Küçük Prens

Lewis Carroll - Alice in Wonderland

James Graham Ballard - Süper Kent

Jules Verne - Dünyanın Merkezine Yolculuk, Aya Yolculuk, Denizler Altında 20000 Fersah

Friedensreich Hundertwasser - Küf Manifestosu

Liam Young - Spekülatif Mimarlık

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Figure Appendix. 17 Studio Altı | Üstü's Bibliography, 2020-2021
Fall Term.