

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

**SPECULATIVE ARCHITECTURE AS A CRITICAL AND CREATIVE ACT  
IN THE ARCHITECTURAL LEARNING ENVIRONMENT**



**MASTER OF ARCHITECTURE**

**Defne AKIR KIRMACI**

**Department of Architecture**

**Anabilim Dalı : Herhangi Mühendislik, Bilim**

**Supervisor: Prof. Dr. Tayyibe Nur ÇAĞLAR**

**DECEMBER 2022**

## **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.

Defne AKIR KIRMACI



## 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.

Defne ÇAKIR KIRMACI



## ABSTRACT

Master of Science

### SPECULATIVE ARCHITECTURE AS A CRITICAL AND CREATIVE ACT IN THE ARCHITECTURAL LEARNING ENVIRONMENT

Defne AKIR KIRMACI

TOBB University of Economics and Technology  
Institute of Natural and Applied Sciences  
Department of Architecture

Supervisor: Prof. Dr. T. Nur AĐLAR

Date: December 2022

In a world of continuous and rapid evolution, inevitably, the roles of the architectural design has moved beyond the boundaries and capabilities of the discipline to stay current. In the meantime, against numerous problems that the world is witnessing, the architectural design has been responsible for taking positions and actions, together with responding constantly changing conditions. So, in the first quarter of the 21st century, the emerging approaches that are aware of these roles and responsibilities of the discipline and push the limits of it have become essential for today's architectural practice and discourse. Speculative architecture is one of these approaches, which proposes a visionary understanding to explore the possibilities of architecture, paying regard today's heterogeneous environment. This design practise is based on a critical and creative act and an open-ended field of inquiry. Moreover, it particularly claims that architecture is not just an act of construction, but also has a role as a facilitator of thinking on the vision of the society and the world in the way of bringing alternative values, forms, and representations out.

The thesis focuses on exploring and discussing the concept of speculative architecture, which presents potential by pushing the boundaries and capabilities of architectural

design and uncovering the invisible qualities of architecture. It also asserts that the architectural learning environment is the most effective place to bring out this understanding, since it is a multi-layered and experimental research medium. The fact remains that architectural education has the chance to be free, and also the responsibility in both design and research to adapt today's social, physical, and digital conditions, unlike the profession. In this respect, the scope of the study is on comprehending speculative architecture and scrutinize the potentials and effects of it in the educational context. After conducting a comprehensive study to form a theoretical framework for speculative architecture, the thesis examines the speculative proposals, developed at the 2020-2021 Diploma Studio, MIM 402 Architectural Design Studio VIII, at TOBB, ETU, Department of Architecture, as the relevant cases, to identify the approach' contributions to the architectural learning environment. Embracing speculative architecture thinking, the Diploma Studio prepare an environment apt to enhance the architecture student's ability to think critically and encourages a designerly position by triggering the fundamentals of architectural thinking. So, the Diploma Studio outputs make able to obtain an in-depth evaluation of the potentials speculative architecture in the architectural learning environment presents.

**Keywords:** Critical attitude, Discursive activity, Creative design process, Speculative proposal, Studio environment.

## ÖZET

Yüksek Lisans

### MİMARİ ÖĞRENME ORTAMINDA ELEŞTİREL VE YARATICI BİR EYLEM OLARAK SPEKÜLATİF MİMARLIK

Defne ÇAKIR KIRMACI

TOBB Ekonomi ve Teknoloji Üniversitesi  
Fen Bilimleri Enstitüsü  
Mimarlık Anabilim Dalı

Danışman: Prof. Dr. T. Nur ÇAĞLAR

Tarih: Aralık 2022

Sürekli ve hızlı bir evrim dünyasında, mimari tasarımın rolü de güncel kalabilmek adına kaçınılmaz olarak disiplinin sınırlarının ve yeteneklerinin ötesine geçmektedir. Bununla birlikte, dünyanın tanık olduğu sayısız probleme yönelik bir pozisyon almak ve harekete geçmekle, aynı zamanda sürekli değişen koşullara cevap vermekle yükümlü bir konumdadır. Bu sebeplerden ötürü, 21. yüzyılın ilk çeyreğinde disiplinin bu rol ve sorumluluklarının farkında olan ve sınırlarını zorlayan yaklaşımlar günümüz mimarlık pratiği ve söylemi için önemli hale gelmiştir. Spekülatif mimarlık, günümüzün heterojen ortamını göz önüne alarak mimarlığın olanaklarını keşfetmek adına vizyoner bir anlayış öneren bu yaklaşımlardan biridir. Bu tasarım pratiği, eleştirel ve yaratıcı bir eyleme ve açık uçlu bir sorgulama alanına dayanmaktadır. Ayrıca, mimarlığın sadece bir inşa etme eylemi olmadığını, alternatif değerlerin, biçimlerin ve temsillerin ortaya çıkarılması yolunda toplum ve dünya vizyonu üzerine düşünmeyi kolaylaştırıcı bir role sahip olduğunun altını önemle çizer.

Tez, mimari tasarımın sınırlarını ve yeteneklerini zorlamak ve mimarinin görünmez niteliklerini ortaya çıkarmaya çalışmak yoluyla potansiyel sunan spekülatif mimarlık kavramını yeniden düşünmeye ve tartışmaya odaklanmaktadır. Ayrıca mimari öğrenme ortamının çok katmanlı ve deneysel bir araştırma ortamı olması nedeniyle bu



anlayışın yeşermesi adına en etkili yer olduğunu ileri sürmektedir. Çünkü mimarlık eğitimi, hem özgür olma şansına, hem de, mesleğin profesyonel ortamının aksine, günümüzün sosyal, fiziksel ve dijital koşullarına uyum sağlama adına tasarım ve araştırmaya yönelik bir sorumluluğa sahiptir. Bu bağlamda, çalışmanın kapsamı spekülâtif mimariyi anlamak ve eğitim bağlamındaki potansiyellerini ve etkilerini irdelemektir. Tez, spekülâtif mimarlığa teorik bir çerçeve oluşturmak için kapsamlı bir çalışma yaptıktan sonra, yaklaşımın mimari öğrenme ortamına katkılarını okuyabilmek için, TOBB, ETÜ, Mimarlık Bölümü, 2020-2021 Bahar Dönemi Diploma Stüdyosu, MİM 402 Mimari Tasarım Stüdyosu VIII'de geliştirilen spekülâtif önerileri incelemektedir. Spekülâtif mimarlık düşüncesini benimseyen Diploma Stüdyosu, mimarlık öğrencisinin eleştirel düşünme becerisini geliştirmeye uygun bir ortam hazırlar ve mimari düşüncenin temellerini tetikleyerek tasarımcı bir pozisyonu teşvik eder. Böylece, Diploma Stüdyosu çıktıları, mimari öğrenme ortamında spekülâtif mimarinin sunduğu potansiyellerin derinlemesine bir değerlendirmesini elde etmeyi mümkün kılar.

**Anahtar Kelimeler:** Eleştirel tutum, Söylemsel eylem, Yaratıcı tasarım süreci, Spekülâtif öneri, Stüdyo ortamı.

## ACKNOWLEDGEMENTS

First and foremost, I owe my deepest gratitude to my thesis supervisors, Prof. Dr. T. Nur Çağlar and Asst. Prof. Dr. Selda Bancı for their valuable guidance, advice, criticism and insight during the thesis study. I admire their patience and that they provide endless support and encouragement. During this time, having the chance to work with them was a great privilege.

I would like to thank my thesis committee; Prof. Dr. Celal Abdi Güzer, Prof. Dr. Mine Özkar, and Asst. Prof. Dr. Zelal Çınar for their invaluable comments, questions, and evaluations. And many thanks to Assoc. Prof. Sait Ali Köknar and Asst. Prof. Dr. Işıl Ruhi Sipahioğlu for their valuable contributions in the critics of the final jury. I would also like to thank TOBB University of Economics and Technology that provided me with an opportunity as a scholarship student and teaching asistant and also faculty members of Department of Architecture for this period.

I do not know how to thank my beloved husband, Abdullah Kırmacı, who provides my self-confidence always. I am incredibly thankful for all the support and patience he showed during the realization process of my thesis. I could not do it without his support and encouragement. Fortunately, he is with me in my life. I would also like to declare my love for my cute cat, *Caz*, for all the entertainment and emotional support.

I would like to express my gratefulness to my family, Meliha, Cevdet, and Hamitcan. Their presence, unlimited support, love, and friendship are what I will always appreciate the most in my life. I would also like to thank my extended family whose names I could not mentioned, yet I always felt and appreciate their support.

My dearest friends, Ayça Duran, Elif Ecem Pala, and Meltem Kumru have been a source of motivation during this thesis. I am incredibly thankful to my dear, Pelin Gür, for her precious friendship, and for being always there to motivate me whenever I needed. We have shared almost everything from tears to laughter for many years.

Finally, my deepest gratitude is due to my grandmother, Şahsenem Büyüklimanlı, who has a special role in my life. It is a privilege to grow up with her. Her unconditional love further motivated me in my work. I dedicate this thesis to her.



## TABLE OF CONTENTS

	<u>Page</u>
<b>DECLARATION OF THE THESIS</b> .....	<b>ii</b>
<b>TEZ BİLDİRİMİ</b> .....	<b>iv</b>
<b>ABSTRACT</b> .....	<b>vi</b>
<b>ÖZET</b> .....	<b>viii</b>
<b>ACKNOWLEDGEMENTS</b> .....	<b>x</b>
<b>TABLE OF CONTENTS</b> .....	<b>xi</b>
<b>1. INTRODUCTION</b> .....	<b>1</b>
1.1 Prologue.....	1
1.2 Literature Review .....	5
1.2.1 The concept of speculative design .....	5
1.2.2 The background of speculative design.....	9
1.2.3 Its place in the practice and architectural context .....	12
1.3 The Scope of the Study.....	16
1.4 The Objective of the Study.....	19
1.5 The Methodology and Organization of the Study .....	20
<b>2. THEORETICAL FRAMEWORK</b> .....	<b>23</b>
2.1 Position.....	24
2.1.1 Architectural subject .....	25
2.1.2 Diverse perspectives.....	30
2.1.3 Critical attitude.....	34
2.2 Discourse .....	38
2.2.1 Critical thinking.....	39
2.2.2 Conceptuality .....	44
2.2.3 Speculative theory .....	47
2.3 Production.....	51
2.3.1 Critical vision .....	52
2.3.2 Research .....	57
2.3.3 Speculative scenario .....	61
<b>3. ARCHITECTURAL LEARNING ENVIRONMENT: STUDIO EXPERIENCES</b> .....	<b>65</b>
3.1 Architectural Learning Environment.....	65
3.2 A Tool for Speculative Architecture .....	69
3.3 The Case: 2020-2021 Diploma Studio .....	78
3.4 The Discussion .....	116
<b>4. IN LIEU OF CONCLUSION</b> .....	<b>125</b>
4.1 Epilogue.....	125
<b>REFERENCES</b> .....	<b>131</b>
<b>APPENDICES</b> .....	<b>139</b>
<b>CURRICULUM VITAE</b> .....	Hata! Yer işareti tanımlanmamış.



## LIST OF FIGURES

	<u>Page</u>
Figure 1.1 : Architecture and New Architecture void.....	2
Figure 1.2 : A/B.....	6
Figure 1.3 : Traditional design vs Speculative design .....	11
Figure 1.4 : Liam Young's Planet City, Film still, 2021 .....	14
Figure 2.1 : Alternative presents and speculative futures .....	28
Figure 2.2 : PPPP, Illustration by Dunne & Raby.....	29
Figure 2.3 : Alexander Brodsky and Illya Utkin’s Columbarium Architecture (Museum of Disappearing Buildings), 1984/90.....	33
Figure 2.4 : Lebbeus Wood’s “War & Architecture”.....	36
Figure 2.5 : Cedric Price’s Fun Palace, 1961 .....	37
Figure 2.6 : The Lifecycle of Imaginaries.....	43
Figure 2.7 : Yona Friedman’s Spatial City Project.....	50
Figure 2.8 : Exploration through generation and materialization of design idea(s)..	53
Figure 2.9 : Bruno Taut’s Alpine Architecture, The Building Area on Monte Generoso.....	56
Figure 2.10 : Archigram’s Instant City .....	60
Figure 3.1 : The Outline of Speculative Architecture prepared by author in GRAPHCOMMON environment.....	69
Figure 3.2 : The template and the diagram of the tool prepared by author.....	71
Figure 3.3 : UPCYCLER PARK by Beyza Ayaz, İrem Tümay, Yasemin Engin.....	81
Figure 3.4 : UPCYCLER PARK’s visual graphic. ....	82
Figure 3.5 : POPS ANKARA by Büşra Bal, Emre Cansever, Ecem Bozbey, Merve Uğurlu.....	83
Figure 3.6 : POPS ANKARA’s visual graphic. ....	84
Figure 3.7 : JUNKYARD by Fatih İbiş, Pelin Güç, Pelin Yalçın.....	86
Figure 3.8 : JUNKYARD by Fatih İbiş, Pelin Güç, Pelin Yalçın.....	87
Figure 3.9 : EARTH DECONSTRUCTION by Asya Soylu, Gökçe Ünlü, Nilsu Taşel. ....	88
Figure 3.10 : EARTH DECONSTRUCTION’s visual graphic. ....	89
Figure 3.11 : BIOTIC URBAN NETWORK by Ece Melisa Tunca, Oğuz Kağan Erge, Zeynep Göktoprak. ....	90
Figure 3.12 : BIOTIC URBAN NETWORK’s visual graphic.....	91
Figure 3.13 : NEXUS by Bengüsu Yeşiloğulu, Gökhan Sagun, İrem Malgaş. ....	93
Figure 3.14 : NEXUS’s visual graphic.....	94
Figure 3.15 : COMMON SPACE by Ebrike Karaca, Hilal Etleç, Merve Kıratlı. ....	95
Figure 3.16 : COMMON SPACE’s visual graphic.....	96
Figure 3.17 : BOULEVARD XYZ by Elif Nur Bek, Zeynep Akdemir.....	97
Figure 3.18 : BOULEVARD XYZ’s visual graphic.....	98
Figure 3.19 : THE REUNION by Yakup Cesur.....	99
Figure 3.20 : THE REUNION’s visual graphic.....	100
Figure 3.21: OIKOS by Çağılsu Kardeş.....	102
Figure 3.22 : OIKOS’s visual graphic.....	103

Figure 3.23 : SEPERATE by Adir Rumet Birtane, Levent Batu Özenalp, Yusuf Kimyon.....	104
Figure 3.24 : SEPERATE's visual graphic.....	105
Figure 3.25 : BETWEENNESS by Elif Nur Bek, Zeynep Akdemir. ....	106
Figure 3.26 : BETWEENNESS's visual graphic. ....	107
Figure 3.27 : METROPOLIS BODY by Alperen Pehlivan.....	108
Figure 3.28 : METROPOLIS BODY's visual graphic.....	109
Figure 3.29 : THE WATER by Damla Özden, Esra Çopur, Gülşah Karagöz, Selahattin Nacar. ....	110
Figure 3.30 : THE WATER's visual graphic. ....	111
Figure 3.31: THE KITSCH by Kerem Berkay Taş, Püren Bahçıvan, Sevim Pınar Yorulmaz.....	112
Figure 3.32 : THE KITSCH's visual graphic. ....	113
Figure 3.33 : LEARNING LANDSCAPE by Asude Aydın, Semaye Efe, Şengül Bulut.....	114
Figure 3.34 : LEARNING LANDSCAPE's visual graphic. ....	115
Figure 3.35 : THE LOCK by Burçin Pelin Kantaş. ....	115
Figure 3.36 : THE LOCK's visual graphic.....	116
Figure 3.37 : The visual graphics all together prepared by author.....	117





# 1. INTRODUCTION

## 1.1 Prologue

Architecture has always been a complex and progressive discipline. However, especially in the first quarter of the 21st century, under constantly changing conditions in the technologically, culturally, and aesthetically evolving world, it acquires different dimensions and stays the course of searching for what is beyond its limitations to keep pace with today's environment. Accordingly, the boundaries and capabilities of the discipline have expanded from various aspects to respond to all the environmental, social, cultural, and technological transformations. This expansion creates today's heterogeneous environment in some way that can embrace various approaches in the discipline, from digital design to fictional design, with the changes in construction technologies, materials, media, and more. As Fisher (1994, p.45) says, "[...] it is changing in a lot of different directions at once, suggesting that the profession in the future will be more diverse and more fragmented than in the past". So, in the process of time, the change in architectural design tectonics, in the way architecture is practiced, and even in the vocabulary of the debates on architectural practice has enhanced the possibilities of architecture in a lot of different aspects, has bent its rules, and has interlaced it with other related fields and disciplines.

With this evolvement in the discipline and technological advances, the world has faced significant problems, including climatic change, population change, and even a struggling economy. Thus, while responding to the changing conditions, the discipline of architecture has been responsible for taking positions and actions toward these problems. The role of architecture has moved beyond just being an act of construction and beyond a system that offers only spatial solutions. It has become a facilitator of thinking about the world's problems by bringing alternative values, forms, and representations out and being a leader to stimulate alternative visions.

So, in the 21st century of the world's changing conditions and the existence of significant issues on a global scale, there are different emerging approaches in architectural design looking at the borders of what could be. Because as can be seen in

Steven Holl’s table of “Architecture and New Architecture,” architectural design’s role has changed in the context of this century (Holl, 2007) (See Fig. 1.1). At this point, if the part which the traditional boundaries have identified in the field of architecture is evaluated as the ongoing architecture, as Çağlar claims, “unlike the ongoing architecture, original and imaginative architectures emerge as the continuation of a new open-ended, colorful, polyphonic, multicultural world progression” (Url-1). This continual state of becoming of architecture supports the understanding of architectural design that has always been willing to transform following the development of the world and to renew itself according to the current conditions. These emerging approaches become essential for today’s architectural practice and discourse because they push the limits of the discipline in the way of radical changes in the world and make the discipline a more open and exploratory field.

<b>Classic</b>	<b>Modern (20th century)</b>	<b>21st Century</b>
1. Absolute	Relative	Interactive
2. Fixed	Stable	Dynamic
3. Physical-Metaphysical	Physical-Real	Virtual-Real
4. Space and Time	Space-Time	Space-Time-Information
5. Essence	Matter	Information
6. Single	Divided	Diverse
7. Analogical	Mechanical	Digital
8. Ritual	Functional	Operative
9. Symbolic	Dogmatic	Contingent
10. Harmonious	Autonomous	Accorded
11. Evocative	Absent	Reactive
12. Hierarchical	Positional	Tactical
13. Continuous	Discontinuous	Intermittent
14. Compact	Fragmented	Fractal
15. Uniform	Variable	Evolutional
16. Exact	Precise	Combinatory
17. Predictable	Measurable	Differential
18. Norm	Type	Gene
19. Proto-logical	Typo-logical	Topo-logical
20. Formal	Abstract	Mixed
21. Figurative	Structural	Infrastructural
22. Solemn	Severe	Easygoing
23. Ceremonial	Strict	Uninhibited
24. Pure	Purist	Crossbred
25. Code	Relationship	Combination
26. Control	Order	Synergy
27. Flat (2d)	Volume	Landscape
28. Composition	Position	Disposition

Figure 1.1 : Architecture and New Architecture void (Holl, 2007, p. 19).

These emerging approaches are supposed to be qualified in some ways to adapt to the new open-ended, colorful, polyphonic, multicultural world progression, as a matter of course. The idea of ongoing architectural design, which encourages fundamentally rethinking the evolving world and complex areas of human life and society in the 21st century's interactive and dynamic medium, heads these qualities and values. Because, alongside of an understanding of ongoing architectural design that focuses to build directly as if the conditions have not changed with smaller evolutions and the same views, the role of architectural design as a facilitator of thinking brings it to a point where it can feel the transformation better, can adapt to differences, generate thoughts on universal problems, and can take a position accordingly. So, the mainstay of these emerging approaches is to pursue renewed values and qualities and think instead of staying the same when the technology, techniques, tools, methods, interdisciplinary interactions, and even the words of communication change.

In fact, throughout the history of the discipline, these kinds of architectural design understandings focused on change and transformation and are distinguished among the ongoing ones that have always been on the agenda of architecture. There has been a stance against the existing order in every period. Architectural knowledge has continuously been fed by these emergent visionary<sup>1</sup> approaches that take a position outside the borders and seek alternative ways of doing architecture in which many creative acts and revolutionary actions are involved and where reality is measured and criticized.

There have been propounded new ways and manners of understanding, expressing, and presenting architectural design by adapting to the social, technological, media, and economic conditions of their periods, thanks to these approaches, especially in the 20th century. Because, especially the effect of constantly accelerating industrial production and the rapid development of technology, has allowed many architects to produce ideas on humanity and their place to live, to trigger the change and transformation of society and the city, as well as to search for a new/alternative future.

---

<sup>1</sup> For Collins (1979, p.244), "in general, the visionary represents a theoretical, speculative, or even imaginary statement or position that is likely to be considerably ahead of its time and may not even be intended to be carried out".

It is possible and important to perceive the wide range of architectural movements, formations, or tendencies that act with such understanding in the form of a series<sup>2</sup>. Considering it from the beginning of the 20th century, even if these architects differentiate from each other due to the influence of certain movements and design approaches in different geographies, what unites them on a common ground is that they have produced unusual ideas about a vision for the future of humanity with the technology and techniques of their periods, by adopting an unconventional mentality. They have perceived design activity as “the planning process to achieve a preferable future, and the ability to recognize pre-existing patterns on the system and synthesize them to produce a view of a possible future state of the system” (Url-2). So, it can be said that they have exhibited the value of understanding architectural design that has found original and imaginative ways of doing architecture under world progression and the current conditions and thinking beyond its limitations, besides ongoing approaches.

In a similar vein, the discipline of architecture also witnesses various emerging approaches in the 21st century, which follow the thinking sphere of the discipline. Speculative architecture is one of these approaches, which proposes an architecture conception based on a critical approach and an open-ended field of inquiry as a way of doing architecture, remarked by Liam Young, who claims that:

Speculative architectural practice is really just an attempt to stay relevant in the context of a city that is always changing. I use this type of work to think about how, as designers, we could engage with emerging technologies in a much more critical and urgent way. Traditional architecture exists at the wrong end of the technology transfer line. Technology always happens to us rather than being shaped by us. With this type of work we are speculating and acting on the potentials of technology, and being active agents in shaping the development of where it could go and what we could use it for. So, I thought that operating with networks, software, stories and fiction within other cultural forms was a timely and legitimate form of architectural practice (Url-3).

This thesis focuses on basically speculative architecture by considering it as an emerging approach searching what is beyond the discipline’s limitations, trying to respond to the developing world in terms of technology, culture, and aesthetics, and of course, having the ability to bring a visionary understanding to architectural design in

---

<sup>2</sup> See Appendix 1.

the changing environment of the 21st century. Before addressing the scope of the thesis, it is essential to look at the literature primarily to understand why speculative architecture is discussed and what it presents in terms of architectural design and to reconsider how it can serve or provoke the discipline of architecture.

## **1.2 Literature Review**

### **1.2.1 The concept of speculative design**

As one of the alternative practices emerging as a result of a new open-ended, polyphonic, multicultural world progression, the term 'speculative design' was introduced to the design environment. Developed as a sort of manifesto in "Speculative Everything - Design, Fiction and Social Dreaming" by Anthony Dunne and Fiona Raby (2013), the term is a broadened form of 'critical design,' firstly used in a part of Dunne's doctoral dissertation (1997). They see critical design as an understanding towards why we design instead of how and what we design. After elaborating the term critical design, in a detailed way in their 2001 book "Design Noir: The Secret Life of Electronic Objects," they have expanded their understanding of design, associated with the implications of new technologies, by considering it with cultural, social, economic, political and ethical dimensions (Dune & Raby, 2001). In fact, by broadening their scope with the term speculative design, they indicated an understanding incorporating a multitude of worldviews, ideologies, and possibilities. (Dunne & Raby, 2013).

They believed that there were other possibilities for design. According to them, design is a medium for asking stimulative questions, particularly about the relationship between technology and society in a social context, so they considered it beyond the construction of human needs. With respect to this, they introduced the act of speculation as an activity to produce ideas as a critique of cursory attitude through alternative scenarios where the future is questioned without the intention of seeking answers. For them, this form of design "thrives on imagination and aims to open up new perspectives on what is sometimes called wicked problems, to create spaces for discussion and debate about alternative ways of being, and to inspire and encourage people's imaginations to flow freely" (2013, p.2).

This explanation of their speculative practice shows that design can be a medium for analyzing, critiquing, and rethinking the complex areas of human life and society. “Design speculations can act as a catalyst for collectively redefining our relationship to reality” (Dunne & Raby, 2013, p.2). Based on this understanding of design, they proposed a manifesto of speculative design consisting of canon texts with comprehensive and categorical definitions of foundational terms in their book “Speculative Everything - Design, Fiction, and Social Dreaming” (See Fig. 1.2). These foundational terms were outlined through a comparison that forms a direct counterpart to one another.

A	B
Affirmative	Critical
Problem solving	Problem finding
Provides answers	Asks questions
Design for production	Design for debate
Design as solution	Design as medium
In the service of industry	In the service of society
Fictional functions	Functional fictions
For how the world is	For how the world could be
Change the world to suit us	Change us to suit the world
Science fiction	Social fiction
Futures	Parallel worlds
The “real” real	The “unreal” real
Narratives of production	Narratives of consumption
Applications	Implications
Fun	Humor
Innovation	Provocation
Concept design	Conceptual design
Consumer	Citizen
Makes us buy	Makes us think
Ergonomics	Rhetoric
User-friendliness	Ethics
Process	Authorship

Figure 1.2 : A/B (Dunne & Raby, 2013, vii).

As specified as two connected lists in the table, there are two representations of design practices. Whereas the A-part of the manifesto represents what speculative design is not, the B-part represents what it is. However, one should not be considered a replacement but an alternative to the other. Dunne & Raby argue that, together with

traditional one, there has to be an alternative form of design practice to find a 'preferable' development and envisage the world's potential changes, engaged with society and technology, employing critical thinking. In this regard, as an alternative to what they state as the traditional design in the A-part of the manifesto, they present the speculative design in the B-part.

Based on this manifesto, the term speculative design was used to interpret the installation “Eutropia<sup>3</sup>” as a case study in the educational booklet called “Introduction to Speculative Design Practice” by Mitrovic (2015), who developed explanations on it in line with the approach of Dunne and Raby. He made an overview and specified the basic characteristics of the practice by comparing its relations with different design practices. For him, speculative design is both critical and discursive practice based on critical thinking and dialogue (Mitrović, 2015). From this viewpoint, this understanding embrace design as a critical act interest in critically asking unusual and uncomfortable questions to set a dialogue on what the world can be potential. He argued that:

Such an approach to design does not deal with meeting current and future consumer needs, but with re-thinking a technological future that reflects the complexity of today's world. Speculative practice opens a space for discussing and considering alternative possibilities and options, and for imagining and redefining our relation to reality itself. Through its imagination and radical approach, by using design as a medium, it propels thinking, raises awareness, questions, provokes action, opens discussions, and can offer alternatives that are necessary in today's world. (Mitrović, 2015, p.15).

With the publication of the exhibition called “XX1T Milan | 21st Century Design After Design<sup>4</sup>”, which asks the question ‘what’s the sense of being a ‘designer’ in the New Millenium?’, Mitrovic extended his “Introduction to Speculative Design Practice” to discuss further expansion of speculative design and its methodology. The publication

---

<sup>3</sup> “Eutropia was produced for the exhibition titled City | Data | Future. The City | Data | Future exhibition shows nine works, where five works have been initiated during the UrbanIXD summer school, two have been curated for the exhibition purposes and the remaining two have been directly commissioned for the exhibition. The exhibited projects emerged from critical design practice and represent fictions speculating about possible future scenarios that we, as citizens living in technologically expanded hybrid cities of the future, can expect” (Mitrović, 2015).

<sup>4</sup> From April 2 to September 12, 2016, the Palazzo dell’Arte, home of the Triennale of Milan, is the main venue of the 21st edition of the International triennial exhibition (XX1T), entitled 21st century. Design after design. What’s the sense of being a “designer” in the New Millenium? This is the big question the 2016 edition of the Triennale is based upon. The exhibition, following a multidisciplinary approach, combine various cultural fields – industrial design, architecture, art, technology, anthropology, and entertainment.

also included a series of interviews that tried to answer the question of the exhibition. The authors of the presented works and the prominent international practitioners in the field of speculative design discussed what speculative design is and its role in contemporary design practice. With these interviews, this design practice approached from different perspectives has various explanations.

One of these interviewees, James Auger, found his previous definition limiting. Priorly, he defined speculative design as a practice “describing how a combination of informed extrapolations of an emerging technology and the application of techniques borrowed from film, literature, ecology, comedy, and psychology can be used to develop and present plausible futures” (Auger, 2013, p.11). The limiting factor was the overemphasis on the future. He also expanded his definition by focusing on new and alternative possibilities to challenge established systems and roles (Url-4).

In accordance with this definition, based on the what-if question, speculative design focuses on both “speculation on the possible futures” and “the design of an alternative present” (Mitrović, 2015, p.19). It dwells on both the question of new patterns of change through potential future scenarios and the criticism of the present condition. In other words, speculative design challenges existing paradigms by utilizing the potential of technological developments with the way of offering the new or the alternative. As Auger emphasized in an interview where the importance of speculative design was discussed that it allows questions “for the reconfiguring of elements, motivations, structures or systems that exist in the world today” (Url-5). In point of fact, speculative design intends to discuss the changing relations of today to envision all sorts of possibilities. Dunne & Raby (2013, p.6) also believes that it is interested “not in trying to predict the future but in using design to open up all sorts of possibilities that can be discussed, debated”.

With this, speculative design embodies a narrative quality for the sake of discussing all sorts of possibilities. This kind of narrative can be considered as “thought experiments—constructions, crafted from ideas expressed through design” (Dunne & Raby, 2013, p.80). So, speculative narratives enable the construction of speculations and questions leading to thought-provoking designs. Considering the narrative quality of speculative design, Malpass (2015, p.70) remarks on its rhetorical function providing “delivering a deliberate message that is potent enough to spark contemplation, discussion, and debate”. That is to say, this narrative potential gives a



space for bringing critical ideas into the designs. Also, as Mitrović (2015, p.17) points out, “it legitimately uses tools, techniques, instruments, methods, genres, and concepts such as fictional narratives, film language, screenplay, storyboard, user testing, interviews/questionnaires, games, but also media and pop culture phenomena”. So, it engages with any accessible media/mediums/materials of today, specially empowered with the digitalization era.

In light of these definitions that outline the founding principles of speculative design, it can be said that this concept is still expanding, changing, and open to further expansions. Of course, there are essential principles indicating the main ground that this approach is constructed. However, since speculative design is one of the emerging concepts of today as an alternative way to design, it is in a continual state of becoming in terms of its characteristics, explanations, and methods. It can constantly be reconstructed, especially according to the different disciplinary perspectives. For this reconstruction, it is essential to address both its background and its place in the discipline of architecture, for this thesis.

### **1.2.2 The background of speculative design**

Design has the capability to be interdisciplinary, multi-layered, and experimental, so it embodies different kinds of practices or approaches that can overlap each other. Speculative design, the broadened form of critical design, also comprises or is related to other design-related activities such as design fiction, future design, anti-design, radical design, interrogative design, discursive design, adversarial design, futurescape, design art, transitional design. (Dunne & Raby, 2013; Mitrović, 2015). What is evident at the intersection of them is the capacity to design about ideas.

Speculative design has in common with these practices, depending upon particular perspectives, and subtly differs from them. Malpass (2013, p.353) perceives associative, critical, and speculative design as critical practices that overlap each other in terms of “the use of satire, rationality, and narrative to engage and offer critique”. Tharp & Tharp considers anti-design and radical design as predecessors of speculative design owing to a design understanding as “a thought catalyst” and “tools for thinking” in a critical base (Url-6). Dunne & Raby (2013) claim that design fiction is probably the closest to speculative design among these design approaches with its speculative, fictional, and imaginary dimensions of it. They both can be considered research

activity that focuses on possible realms. For DiSalvo (2012, p.109), design fiction has in common with speculative design because of “the use of designerly means to express foresight in compelling, often provocative ways, which are intended to engage audiences in considerations of what might be”. Even if they both engage in design through the implications of asking what-if question, speculative design has a broader purpose. What separates them most significantly is that speculative design has an emphasis on critically questioning what might be.

The critical attitude is the primary act of speculative design. As mentioned before, coined by Dunne & Raby in the mid-nineties, critical design, which is engaged in embodied critique and also certain extent, speculation, is a narrower form of speculative design. In effect, the critical dimension of speculative design has been discussed in the literature before in the form of critical design. Dunne & Raby (2001, p. 58) develops the term, which they regard as an alternative to mainstream design, that aims to “stimulate discussion and debate amongst designers, industry and the public”. It is defined by them later as “critical thought translated into materiality” by questioning all the values or norms of society (Dunne and Raby, 2013, p.35).

Mazé (2009, p.395) also notes on critical design that “critical practice functions as a catalyst to change the mainstream or the status quo” in a book called “Laspis Forum on Design and Critical Practice: The Reader” which focuses on investigative, speculative, and critically oriented design. With a similar focus to what Dunne & Raby state, there is an opinion that “the goal of critical design is not to fulfill a need or to intervene in a given situation or state: it is to provoke, to stimulate a conversation that transgresses norms of which designers and participants alike may have only a partial understanding” (Bardzell, Bardzell, Zimmerman, & Forlizzi, 2012, p.294). Malpass emphasizes the communication of an idea in the same way when discussing critical designers (Malpass, 2015). Embracing more provocative aspects of critical design, Bowen (2010) sees it as a way to explore a broader space of possibilities.

Dunne & Raby (2013) assert that speculative design also comprises critical design but with a more extensive scope. They both aims to raise questions and encourage debate in an intellectual sort of way by using the language of design and in the form of critique. But there is a fact that speculative design differs with its emphasis on the alternative present or speculative future and is trans-disciplinary or multi-disciplinary that offers a rich narrative potential to set a dialogue for society. As Mitrovic (2015,

p.13) states that it takes the critical practice one step further “towards imagination and visions of possible scenarios”.

Speculative and critical design seeks to stimulate discussion through ideas on urban-scale issues in a discursive context that points to their communicative attribution. At the intersection of these two practices, discursive design<sup>5</sup> occurs as a practice of raising questions and encouraging discourse. Emphasizing this intersection of various practices, Mitrović (2015) states that there is an interaction between them, and they do not intend to replace each other (See Fig. 1.3). Also, speculative design has much in common that overlaps with critical design and discursive design, especially regarding their link to the inquiry (Lukens, & DiSalvo, 2012).

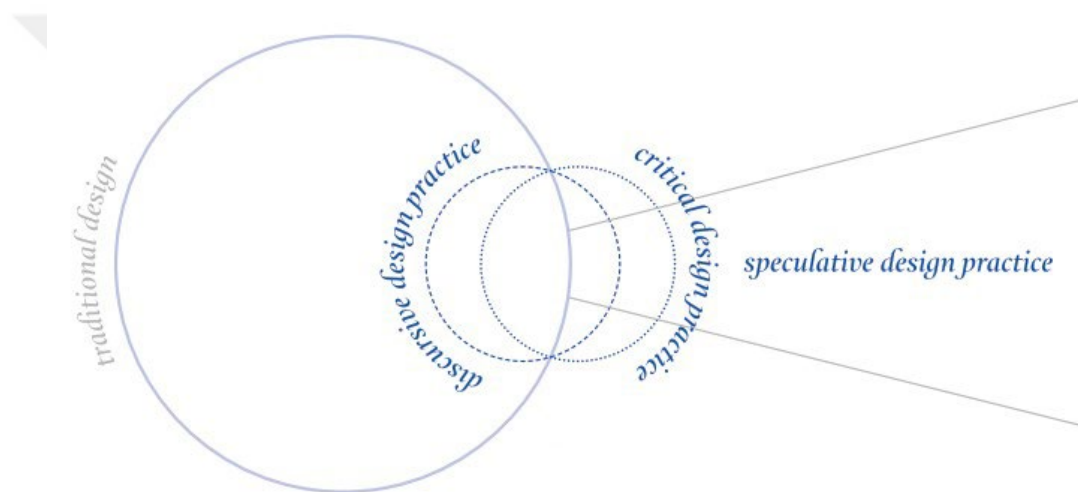


Figure 1.3 : Traditional design vs Speculative design (Mitrović, 2015, p. 9).

As can be seen from the relation of practices Mitrovic introduced, speculative design acts on borders of traditional design and, further, takes a position outside of it. Considering traditional design as a practice that focus on solving problems for the demands with a defined methodology, Mitrovic (2015) sees speculative design as an attitude or position that focuses on asking questions. In effect, he emphasizes the importance of asking "what if" questions for rethinking the alternatives with a

---

<sup>5</sup> For Tharp & Tahrp (2009), “Discursive Design refers to the creation of utilitarian objects whose primary purpose is to communicate ideas—they encourage discourse. These are tools for thinking; they raise awareness and perhaps understanding of substantive and often debatable issues of psychological, sociological, and ideological consequence”.

“broader social context”, contrary to traditional design thinking that remains “practical level” (Mitrović, 2015, pp 11-41). Dunne & Raby presented speculative design as an alternative to traditional design, not as a contrary to it when they created the manifesto. They believe that, together with the traditional one that looks at facts and information, there has to be an alternative form of design practice that looks for scenarios to find a preferable development and envisage the world's potential changes, engaged with society and technology, by means of critical thinking (Dunne & Raby, 2013). So instead of the affirmative pose of traditional design, they introduce speculative design as a practice considering the design and future as a medium to speculate with. As Dunne & Raby, Tharp & Tharp also do not hold that speculative design ought to replace traditional design practice and think of it as an alternative one in which the concern is on why we design rather than focus on what we design, or how we design (Url-7).

Speculative design can be considered as an umbrella concept for these other design-related activities that “redefines the premises and purposes of the discipline” as Mazé emphasizes since it overlaps, comprises, or correlates with them (Url-8). In effect, the extensive ground that this practice structures on undoubtedly are accompanied by an understanding of multi-layered, experimental, and interdisciplinary. With these aspects, speculative design constitutes an emancipated space to design by lying beyond other alternative design practices. Accordingly, it has significant potential in the design environment, especially in the discipline of architecture.

### **1.2.3 Its place in the practice and architectural context**

The discussion on the definitions and characteristics of speculative design has been mostly made through objects of the industrial field that focus on emergent science and methodology. These speculative industrial objects are taking on a subversive role to stimulate discussion, aim to envision futures through design alternatives and create a space for trying out ideas and ideals. Prominent names in the field of speculative design, like Dunne & Raby, Mitrovic, Auger, Malpass, and Disalvo, has been put forward their understanding of speculative design on conceptual design objects through their publications, exhibitions, and workshops. Speculative design regards workshops, exhibitions, and publications as spaces for public encounters with design to raise questions and encourage debate.

This design understanding has been developed and specified over the objects created, particularly in the industrial context. Speculative design definitions, conceptual qualities, characteristics, and methodologies do not come to the fore in the architectural context, which is the main focus of this thesis in the literature. Although there are many sources related to speculation in the discipline of architecture, the framework of an understanding that is directly related to the concept of speculative design and that follows the traces of it has not yet been drawn.

In effect, there are direct historical references and links to speculative design in the architectural context. While developing the term, Dunne & Raby (2013, p.6) says they were inspired by radical architecture that uses speculation for critical and provocative purposes, “particularly projects from the 1960s and 1970s by studios such as Archigram, Archizoom, Superstudio, Ant Farm, Haus-Rucker-Co, and Walter Pichler”. For them, architecture offers the most diverse space for exploring ideas. They underline the many different architectural thinking and produce compelling and inspiring examples. They especially appreciate “visionary architecture, which has an outward facing social or critical agenda, and paper architecture, which, though often introspective and concerned only with architectural theory, is rarely intended to ever be built” (Dunne & Raby, 2013, p.23). Besides, they attach importance to fictional architecture and imaginary architecture, particularly in terms of production and post-production techniques. Considering speculative design as a practice embodied in a range of disciplines, Lukens & DiSalvo (2012) also states that architecture has the most developed history and tradition of speculative design. They also acknowledge the historical connection of the practice in the 1960s. Most importantly, referring to the expression of speculative architecture directly, he emphasizes that it is interested in investigating the possible (Lukens, & DiSalvo, 2012). Also, Manaugh (2009) describes the explorations of speculative possibilities of architecture with the idea that architecture is its own genre of speculative thought, in his book “The BLDG Blog Book: Architectural Conjecture, Urban Speculation, Landscape Futures”.

The understanding that focuses on research and speculation through design as a way of doing architecture is remarked as “Speculative architecture” by Liam Young. In an interview with an online magazine, Young, who calls himself a speculative architect, describes ‘speculative architecture’ as “just an attempt to stay relevant in the context of a city that is always changing” and his works operating “the spaces between design,

fiction, and futures” (Url-3). Considering today’s world’s changing reality and emerging technologies, he explores future potentials and possibilities of emerging urban developments with multidisciplinary critical and speculative thinking and intellectual creativity with his London-based design think tank, Tomorrow’s Thoughts Today (See Fig. 1.4). It must be noted that he relates the future directly with the present. He believes “the role of the future project is to critically engage with the present in a really meaningful way and put in place scaffolds for the futures we want” (Url-3). Besides that, by referencing the radical practice in the 1960s, especially describing Archigram group as speculative architects, he emphasizes fiction embodied by the mediums of popular culture and narratives, empowering new ideas about what architecture could be without ever building a thing. He says:

As a speculative architect, I don’t design buildings as endpoints or outputs, but I would still argue that what I do is architectural, or at least it’s architecture in some form. Instead of creating buildings themselves, I tell stories about the global, urban and architectural implications of emerging technologies. The dominant forces of the past that shaped our cities, buildings, and public spaces are now being displaced by technologies, systems, networks, and stacks. Thus, the architect needs to change their model of practice in order to remain relevant. 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. They try to imagine where new forms of agency exist within the cities changed by these new processes (Url-9).

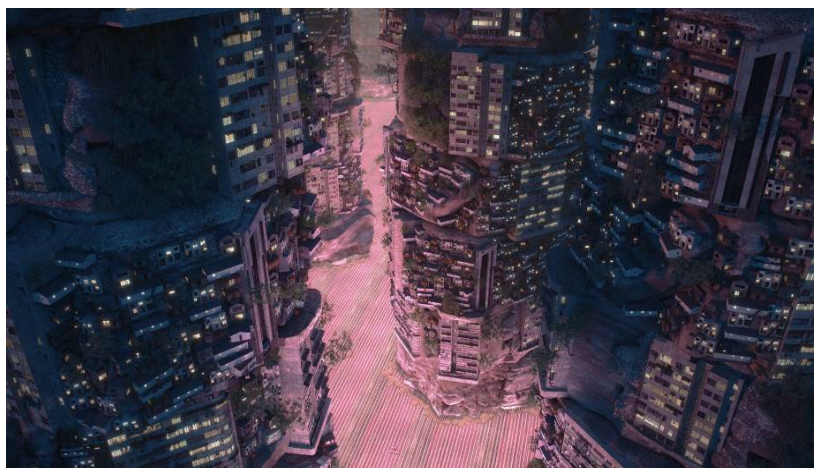


Figure 1.4 : Liam Young's Planet City, Film still, 2021 (Young, 2021).

Along with these explanations, as a platform for performing studies on speculative architecture, Young set up the Fiction and Entertainment MA program at the Sci-Arc architecture school, which focuses on the ideas influencing the construction of future

worlds. Apart from these studies of Young, this thinking also manifests itself in several architectural environments and has gained importance in recent years. For instance, the new speculative architectural proposals were presented in the exhibition titled “The Architectural Imagination” for US Pavilion at the 2016 Venice International Architecture Biennale. There were 12 speculative projects that tried to address the social and environmental issues of the 21st century by shaping forms and spaces into exciting future possibilities. The Radical Today exhibition organized by the Architecture Studio of the Royal Academy of Arts is one of the examples which is interested in redefining the role of architects today. There are also a significant number of architectural competitions aiming to encourage speculative architectural research and design, such as competitions named “Outer Space”, “Fairy Tale” and “The Driverless Future Challenge” by online platform Blank Space; “Skyscraper Competitions” sponsored by the architecture magazine eVolo; “Warning Competition 2020” by Arch Out Loud; 2016 Chicago Prize competition “On the Edge” by the Chicago Architectural Club; Non-Architecture Competitions.

Moreover, there are also various architectural design studios and other initiatives offering speculative and related design education for exploring the visions of the cities of the future, as also can be seen in the project SpeculativeEdu. As the main outcome of SpeculativeEdu project, the book “Beyond Speculative Design: Past – Present – Future” edited by Ivica Mitrović, James Auger, Julian Hanna, Ingi Helgason presents a brief history of speculation in radically different contexts, followed by a broad overview of speculative design approaches, methods, and tools through a series of detailed case studies written by the practitioners themselves.

Besides, it should also be said that although they do not directly call themselves speculative architects, there are contemporary practitioners who adopt the visionary, speculative and critical architectural approach. “Speculation in architecture can be seen in the work of such contemporary practitioners as Rem Koolhaas, Lebbeus Woods, and Diller, Scofidio, and Renfro” (Lukens & DiSalvo, 2012, p.25). Even if they do not make such labeling, the act of speculation can be seen in their works in some respects.

All of these studies indicate the expanding role of the discipline, both architectural discourse and practice. It is an acknowledgment that the discipline of architecture is not supposed to associate just with the act of construction and finalized 'designed object' but can be a critical and creative act to reimagine the world through unusual

scenarios engaged with the developing world and emerging technology. At this point, speculative architecture thinking as an alternative way offers significant possibilities and potentials in terms of redefining the activity of design and reconstructing the meaning of cities. Although the studies and statements developed on it are constantly increasing and diversifying, it is still a concept open to expansion since it is in a continual state of becoming in terms of its characteristics, explanations, and methodology, as mentioned before. Therefore, it is possible to reconstruct the concept of speculative architecture with its essential principles indicating the main ground on which this approach is structured in a way that highlights the possibilities and potentials it offers.

### **1.3 The Scope of the Study**

As seen in the literature review, although the studies conducted on speculative design are continually growing and diversifying, a detailed and adequate theoretical infrastructure has not been entirely revealed. In other words, it is clear that its boundaries are vague in terms of its characteristics, explanations, and methodology in the context of the discipline of architecture, or there is no framework to evaluate its architectural design approach. This thesis focuses on this gap in speculative architecture, generally acknowledging its importance for the discipline since it contains great potential in understanding architectural design in today's environment. It intends to reconsider speculative architecture as an overarching theme within architectural design by constituting a theoretical framework for it, and to explore its potentials. In this way, it is of the opinion that it is possible through speculative architecture thinking, one of the visionary approaches in the 21st century, to uncover the invisible qualities of architecture and reconsider its complex relations with the world or to reveal many new values. It is worth noting that the notion of design already contains speculative values at its core, and explorations of speculative possibilities of architecture are not a new debate. However, the main idea of the thesis is to directly understand the concept of speculative architecture, which presents potential by pushing the boundaries and capabilities of architectural design. It would be accurate to say that the thesis makes a speculation on speculative architecture. Therefore, the scope of the thesis should be considered as a searching rather than a way of finding out a clear definition.



While addressing speculative architecture, the thesis claims that the architectural learning environment is the most conducive place to bring out this visionary approach since “education institutions are the most effective environment to rebel against the routines, status quo and the limits of the discipline” (Çağlar & Curulli, 2020, p.xv). Speculative architecture requires a practice that considers not constructing and its details but generating ideas, critically discusses problems, constructs scenarios focusing on the future, and that looks at the design process on a more knowledgeable level, that utilizes the developing techniques and technology, that is, thinks outside the boundaries drawn in ongoing architecture. So, the architectural learning environment as a multi-layered and experimental research medium provides a proper environment for this practice since architectural education has the chance and also the responsibility, in both design, research, and its critical position in society, unlike the profession.

Moreover, the architectural learning environment needs to renew its responsibilities and goals to respond to the changing conditions like the techniques, the vocabulary, the media, and so on, and to adapt its way of design. In order to adapt to today's social, physical, and digital conditions, the production of this environment needs to be much more diverse, experimental, reflective, critical, radical, and perhaps speculative, capable of taking responsibility, theorizing freely on society and the future of the world, and using different medium by going beyond the plan and section drawing required for construction. According to Directive 2013/55/EU, UIA-UNESCO Charter on Architectural Education, the expected learning outcomes are;

- theoretical and/or factual knowledge;
- cognitive skills (involving the use of logical, intuitive and creative thinking);
- practical skills (involving manual dexterity and the use of methods, materials, tools, etc.);
- to apply knowledge and skills autonomously and with responsibility (Çağlar, & Curulli, 2020).

Architectural education has the ability and all the tools to allow these. However, to have these learning outcomes in today's environment, it is necessary to re-consider the ongoing architectural design approaches. This thesis claims that it would be possible to get closer to these outcomes by adopting speculative architecture as an architectural design approach in the educational context, as well as by assuming that it can create the opportunity to reveal the abilities and hidden qualities of the learning environment.

In light of these, the scope of the study is on comprehending speculative architecture and addressing it in the educational context, as a way to explore of possibilities of architecture and as an enriching approach to the learning environment. In a way, the thesis argues that speculative architecture has enormous potential and implications for education. Sharing this through the thesis is important both for revealing the value of the emerging approaches in the 21st century as a continuation of the evolving world and showing its importance for architectural education.

At this point, the 2020-2021 Diploma Studio<sup>6</sup> at TOBB University of Economics and Technology (TOBB ETU), Department of Architecture, an example of this implication, is a guide in constructing the key elements of the theoretical framework of this thesis. The Diploma Studio is an interdisciplinary, multi-layered, and experimental research medium where the speculative and critical thinking practice structures the essential design principles as a means to improve the studio environment and tools. In a way, the role of the studio is to prepare an environment apt to conduct critical discussions on the speculative level in which urban issues are addressed for a better future world. Together with this, it focuses on scenarios to investigate hidden possibilities of the cities and encourages a designerly position and intellectual creativity by triggering the fundamentals of architectural thinking. So, it leads to acting creative and critical manner in the design process.

The Final Architectural Design Studio (FADS) at the TOBB University of Economics and Technology (TOBB ETU) provides a multi-layered experimental studio environment, which is open to the use of any type of thinking, designing, expression and tools. Our architectural design pedagogy aims to welcome, enable, and enhance multiplicity and plurality by constantly readjusting itself. The exact structure of the studio is only roughly set out beforehand, with enough flexibility to anticipate and accommodate new ideas. In this way, the students and coordinators can experience the moment while constructing it. Because of this intrinsically nonlinear pedagogy, which does not necessarily converge towards a “solution”, the end result is more a documentation of the process than a complete architectural design. Thereby, architecture remains open and experimental (Öztoprak & Çağlar, 2020, pp.135-136)

As a teaching assistant with an observative position in the Diploma Studio, the author claims that three essential factors provide the speculative level and create the

---

<sup>6</sup> TOBB ETU Diploma Studio was supervised by Prof. Dr. Nur Çağlar, Asst. Prof. Dr. Selda Bancı, Asst. Prof. Dr. Işıl Ruhi Sipahioğlu, Asst. Prof. Dr. Zelal Öztoprak, and Defne Çakır Kırmacı during the 2020-2021 Full year

understanding and structure of the Diploma Studio, also by making use of the knowledge from the literature review. Firstly, the Diploma Studio attaches importance to the 'position' architectural designer takes on by holding a point of view and adopting a critical and experimental attitude to question continuously the issue addressed, through acting with a critical identity that makes it possible to observe, explore and reflect through speculative thinking in the design process and through asserting diversified projections and perspectives into the design to reveal the hidden things in the way of alternative values of the future world. Secondly, the Diploma Studio encourages the 'discursive activity', which gives the design thought and idea an intellectual ground and is founded in critical thinking and dialogue and gives students the possibility to search for new modes of understanding that interpretive, experimental, social, architectural factors intervened within a speculative theory. Finally, the Diploma studio emphasizes methodological flexibility and a high level of 'productions' with a range of methods, approaches, and tools to inquiry through design and make imaginary archaeology possible. Since the place of speculative architecture in the educational context is ambiguous, and the diploma studio experimentally constructs its structure and its understanding, it is crucial to understand these factors and their implications in the educational context. Therefore, this thesis focuses on these.

#### **1.4 The Objective of the Study**

In pursuit of the scope of the thesis, the thesis intends to comprehend and scrutinize the potentials and effects of speculative architecture in the educational context in line with its characteristics and main principles. It has potential both for the architectural discourse and practice by revealing the expanding role of design. Since speculative architecture corresponds to the need of the discipline of architecture for an understanding that encourages a fundamental rethinking of the evolving world, emphasizes a critical act in architecture and the need for a design response to today's social, technical, and technological conditions, it is required to make an expansion to understand its position in the discipline. At this point, the objective is to conduct a comprehensive study to form the contour of speculative architecture and to discover its contributions to the architectural learning environment based upon this contour. Other sub-objectives of this thesis are;

- Exploring and discussing the notion of the ‘position’ of an architect / speculative architect in architectural design,
- Exploring and discussing the notion of ‘discourse’ and ‘discursive activity’ for an architect / speculative architect in architectural design,
- Exploring and discussing the notion of ‘production’ of an architect / speculative architect in architectural design,
- Emphasizing the responsibilities of the architectural learning environment in today’s conditions,
- Presenting the outputs of the Diploma Studio,
- Analyzing the outputs grounding them to the framework of speculative architecture.

## **1.5 The Methodology and Organization of the Study**

The study's methodology is twofold: conducting theoretical research to address speculative architecture and its notional contour and using the case study strategy to obtain an in-depth evaluation of its potential and effects in the architectural learning environment. So, the study comprises four main parts, including the introduction as the first chapter and the conclusion as the fourth chapter.

In the second chapter, the study aims to constitute a theoretical framework based on architectural theory and the relevant literature review associated with the topic to present the main principles and characteristics of speculative architecture and how it brings a visionary understanding of architectural design. This chapter is divided into three subsections to address all of these under three essential factors considered as the scaffolding of the theoretical framework. In a way, these factors prepare a scaffolding based on the position of the architectural designer, the discursive form of the design idea, and the productions of the design process to outline the essential aspects of speculative architecture. So, the theoretical framework constructed by considering these factors makes it possible to identify the notional contour of speculative architecture, which creates significant potential by compelling the boundaries and capabilities of architectural design.

In the third chapter, firstly, the study intends to prepare a tool based on the interpretation of the main keywords that emerged based on the theoretical framework and mapped in the graph commons environment in order to evaluate speculative projects developed at the 2020-2021 Diploma Studio, MIM 402 Architectural Design Studio VIII, at TOBB, ETU, Department of Architecture, as the relevant cases. Then, with the help of this tool, it focuses on the Diploma Studio’s structure and addresses

the seventeen speculative projects developed at the Diploma Studio named under 'Comprehending the Future of Ankara: Renewed Landscapes.' All the materials as the outputs of the Diploma Studio, such as the student's productions, jury booklets, jury records, instructor's discussions, and the author's observations, were examined. Since each student brings different projections with their own identity and their ways of actual and intellectual thinking and making may not meet on a single main road, the case study does not seek for a pattern that expressing a system that progresses with clear definitions or methods. So, it just aims to make it possible to assess the outputs and discuss the potential and possibilities of speculative architecture in an educational context. It also needs to be ephasized that, as it discusses these, the thesis may seem to impose speculative architectural thinking, but its intention is to reveal its positive contributions and effectiveness to the educational environment and its components.

In the fourth chapter, which is the concluding part, the thesis discusses which kind of architectural design approach speculative architecture offers in the 21st century, under constantly changing conditions in the technologically, culturally, and aesthetically evolving world, and what is its effects in the architectural learning environment in the way of pushing the boundaries and capabilities of the discipline of architecture.



## 2. THEORETICAL FRAMEWORK

The changing role of architectural design in the 21st century brings along some values and qualities that need to be changed as well in the way of making the discipline a more open and exploratory field. Expanding the borders of the discipline or going beyond it, today's emerging approaches contain these progressive values and qualities in terms of technology, techniques, tools, methods, and interdisciplinary interactions, depending on their understanding of architectural design. At this point, it is important to discuss what kind of values and qualities make a difference in searching for new ways and manners in architectural design and how they change the name of architectural theory and discourse in this evolving world. Speculative architecture thinking is one of the architectural design approaches of today that pioneers in discussing them, with the claim that:

If we want to stay relevant, we cannot afford NOT to engage with critical and speculative methods and tactics in theory and practice, whether it be through academic research, discursive or market-led practices (Url-10).

However, the strategies, principles, and characteristics of speculative architecture that reveal the new or hidden values and qualities are not defined clearly from the disciplinary perspective. This part of the thesis intends to clarify them by identifying its notional contour and constructing its theoretical base. Together with this, it pursues some primary questions, and a point of departure, like:

- Why speculative architecture? How does it create value for architectural practice and theory?
- What kind of architectural design approach does speculative architecture offer in the way of radical changes so that it can respond to constantly changing conditions in the technologically, culturally, and aesthetically evolving world?
- Where does speculative architecture position the architectural designer? Who is a speculative architect?
- What and how does it encourage to produce, and what kind of path does it follow so that its production is aimed at searching what is beyond the limitations of the discipline?

The theoretical framework is based on the three significant factors that serve as the scaffold of the study regarding comprehending the contour and specifics of speculative architecture. Firstly, the notion of the 'position' of an architectural designer is

examined to discuss the importance of speculative architect's position since "speculative design practice should be, above all, understood as an attitude" (Mitrović, Hanna, Helgason, 2021, P.70). Then, the notion of 'discourse' is studied to expound speculative architecture as a discursive form since "it is a discursive activity founded in critical thinking and dialogue" (Mitrović, Hanna, Helgason, 2021, p.69). Finally, within the frame of the notion of 'production', what kind of a production process speculative architecture stimulates is investigated thoroughly. In the end, this part aims to comprehend speculative architecture according to these three factors in light of architectural theory, history, and current literature.

## 2.1 Position

The association of the thinking and making sphere of architecture is directly related to the positioning of the architect, as the architect is the actor of the design process constituted through the acts of both. As Lebbeus Woods also argues that "taking a position" as an architect must be the essential attitude "vis-à-vis other fields of knowledge, and the contemporary world," as he considers "the architects who, by building, or intending to build, are shaping the world" (Url-11). It can be stated that taking a position enables an architect to perform a critical and creative act that leads to attaining a perspective towards the world and becoming the social catalyst with a kind of awareness. Taking the idea that "the design act is always a gesture in a social context," an architect is a rational and socially responsible actor who performs architecture as a praxis<sup>7</sup> and has an inclusive role acting with both intellectual and architectural identity in the architectural design process (Baird, 1969, p.42). The position of the architect, thus, is an essential notion to discuss when architecture is considered a theory-based and a process-oriented activity, not just an act of building with a tangible end product.

---

<sup>7</sup> "Praxis, for me, involves the critical and inextricable meld of theory and practice. Thus practitioner-based research is concerned with processes for theorising practice ... In moving creatively into our practice we are fundamentally concerned to develop new knowledge, to challenge old beliefs and to speculate on the 'what ifs' of our concepts and processes. For the arts practitioner, this new knowledge is made in the context of and challenge to the history, theory and practices of the relevant field. The research function for developing and extending knowledge is judged on the outcome of the research, which synthesises, extends or analyses the problematics of the discipline. It is important to realise that this creative work resembles pure and applied research in any field" (Stewart, 2003, p.4).



Here, position can be regarded as a relative place that a subject locates or belongs to a situation that leads a subject takes action or standing that guides a subject to respond or reflect what exists. It is what enables a subject to act within a set of relationships by holding a particular point of view. By taking a position, thus, an architect creates his/her relative place, situation, or standing to construct his/her theory within a set of relations to express his/her attitude or behavior as a social actor. Here ‘attitudes or behavior’ can be regarded as “the subjective component of situations and as a critical component of the social landscape” (Ritzer, 2007, pp.4868). Thus, an architect seeks to form a frame of mind accompanied by his/her attitude by becoming socially concerned, conveying a meaning based on knowledge, and acting against the existing paradigm. Based on this position, an architect defines his way of thinking and making. So, considering an architect as a rational and socially responsible actor who needs to adopt an attitude, the thesis claims that speculative architecture constitutes the way for an architect to ‘take a position.’ As Dunne & Raby (2013, p.34) lay emphasis on that, speculative design practice is “more of an attitude than anything else, a position rather than a methodology”. Also, in Young’s words, it is about “promoting action” and cultivating critical attitudes (Url-12). In general way of saying, by means of advocating critical and creative act that leads to attaining an attitude for an architect towards the world and becoming the social catalyst with a kind of awareness, it considers an architect as a precursor intellectual to future action that indicates ‘the reflective attitude, the signifying consciousness, and critical mind.’ So, it would not be incorrect to declare that speculative architecture reveals the capability of an architect by encouraging a certain attitude with its ability to inculcate critical thought. Thus, it is necessary for the thesis to explain further what is meant by ‘position’ for a speculative architect.

### **2.1.1 Architectural subject**

The notion of position is directly related to the subject itself, a form of being who has intentions to be grounded and willing to act in a specific manner. The subject becomes the performer behind the action with a reason, a purpose, and meaning and thus has the power to lead the activity. When architects are considered the subjects of the architectural design process, they have the possibility to set rules and create an action that they aim for through comprehending the social phenomena and introducing both

practical and theoretical knowledge on that. It can be stated that “action is motivated, but not caused, by intentions. These intentions give actions their meaning” (Ritzer, 2007, p.60). Considering praxis as a notion indicating an action, the architect as a subject is positioned himself/herself to create that moment of the action by aiming the transformation of the existing structures within a particular intention that gives the action meaning.

It can be stated that a subject who intends to take action seeks to set relations according to the position taken. If considered a powerful subject, an architect designs new relations for the world considering the pre-existing structure since

at the origins of the critical act, there always lies a process of destroying, of dissolving, of disintegrating a given structure. Without such a disintegration of the object under analysis, no further rewriting of the object is possible (Tafuri, 1974, p.153).

So, these new relations are the results of the creative and critical act of an architect and his/her frame of mind in the architectural design process, who redefines his/her position. In effect, an architect seeks ways of developing new knowledge and speculating on the pre-existing structure by intending to design relations.

At this point, to open the discussion of the position of a speculative architect, it is essential to understand what the word ‘speculation’ means itself. Clarifying its meaning would be appropriate to comprehend what it indicates in the architectural design process. Both its etymological origin and modern linguistic variations would be a better guide to infer meaning instead of looking at its common definition in dictionaries<sup>8</sup>.

Etymologically speaking, speculation comes from a series of Latin verbs, which all stem from a Greek root, in turn deriving from Sanskrit (spàs meaning to spy, see, or observe). In this lineage the word suggests an act of mastery over the object observed—after all, speculation and spectacle have the same origin. In its modern European linguistic variations, speculation derives from the late Latin noun *speculatio* (observation, contemplation), itself deriving from the classical Latin verbs and nouns *specere* (look), *speculari* (observe, examine, explore), and *speculum* (looking glass, mirror). (Uncertain Commons, 2013, p.8).

---

<sup>8</sup> Two common definitions of speculation are the following: The activity of guessing possible answers to a question without enough information to be certain (See Url-13). The forming of a theory or conjecture without firm evidence. (See Url-14).

In this respect, by linking it to vision and sight, 'speculation' involves a desire to grasp the unknown through observing, ascertaining, and perceiving, and it can mean to contemplate and form conjectures through observation by looking into the future with a specific frame of mind and reflective attitude. So, the act of speculation in architecture is directly related to the architectural subject who looks, sees, observes, examines, and explores and, thus, who needs to take a position by holding a particular point of view to actualize these. In fact, since the act of speculation in architecture is interested in "critical thinking, that is, not taking things for granted, being skeptical, and always questioning what is given," it can be said that the architectural subject takes a skeptical position<sup>9</sup> (Dunne & Raby, 2013, p.35).

As defined before, by taking a position, a speculative architect constructs his/her own setting behind the action as a social actor who aims to convey a meaning based on both practical and theoretical knowledge and to act towards the existing structure. Speculative architecture presents one of the alternative ways to construct this setting and action for a responsible architect who tends to speculate critically -spy, see, or observe. As Dunne & Raby (2013, p.12) state that it aims to "provide an alternative context" as "a space for thinking, for trying out ideas, and ideals". Similarly, automato.farm asserts that it is "a great safe space ... where it was 'allowed' to explore possibilities [...]" (Url-15). In effect, a speculative architect as the subject of the action acts in that space as an observer within a certain intention in the way of new ideas and ideals to explore.

Moreover, a speculative architect puts forward what-if question by focussing on both "speculation on possible futures" and "the design of an alternative present" (Mitrović & Šuran, 2015, p.13). In other words, speculative architecture dwells on the question of new patterns of change through potential future scenarios and the criticism of present conditions to search for alternatives. Auger (2013, p.13) explains these in his table; there is the possibility to speculate on possible futures "as projections of the lineage, developed using techniques that focus on contemporary public understanding and desires, extrapolated through imagined developments of an emerging technology"

---

<sup>9</sup> The architectural subject takes a skeptical position like the critical theorist. As Bardzell & Bardzell (2013) states, "the job of the critical theorist is to expose these hidden forces that are claimed to determine much of our social lives. Implicated in all of this are social institutions—governments, the sciences, the arts—which means that the critical theorist often takes a skeptical position against these institutions and whatever they celebrate as part of the problem".

and also the possibility to design alternative present that can “step out of the lineage at some poignant time in the past to re-imagine our technological present” and “challenge and question existing cultural, political and manufacturing systems” (See Fig.2.1). From this point of view, there is a correlation between ‘here and now’, and speculative architecture suggests an architect take a position in a cartesian system constituted by them.

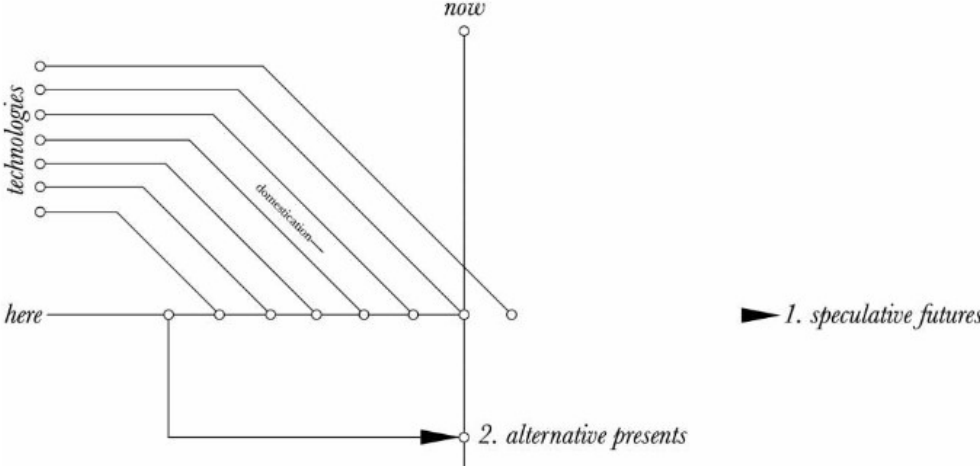


Figure 2.1 : Alternative presents and speculative futures (Auger, 2013, p.13).

Besides, regarding this positioning, also Dunne & Raby re-consider the diagram of a spectrum of alternative types of futures by futurologist Stuart Candy to identify the vision of speculative practice (See Fig. 2.2). This cone of futures includes the possible, plausible, probable and preferable future, which expand from the present on the left, and each cone represents a type of potential for the future. The possible future demonstrates what ‘may happen’, including all the kinds of possibilities imagined, from scientifically possible scenarios to an extreme one. The plausible future encompasses those futures that ‘could happen’ based on current knowledge of the system or science, allowing for forecasting and scenario planning of the alternative or possible could-be. The probable one describes ‘what will likely happen’ according to how the world currently is by assuming the future as the linear extension of the present.

Contrary to these three alternative futures, the preferable future, which exists between probable and plausible ones, concerns what we ‘want to happen’ without worrying about cognitive information. It is a vision based on the sort of subjective value

judgments. This vision alters the reality of the present in such a way that makes the world as desirable as it can be. Even if Dunne & Raby claims that speculative design aims to design for the preferable future, this thesis claims that speculative architecture creates a space for an architect to be able to take a position wherever he/she intends in this spectrum of alternative future together with the present. It is because “futures are not a destination or something to be strived for but a medium to aid imaginative thought—to speculate with” (Dunne & Raby, 2013, p.3).

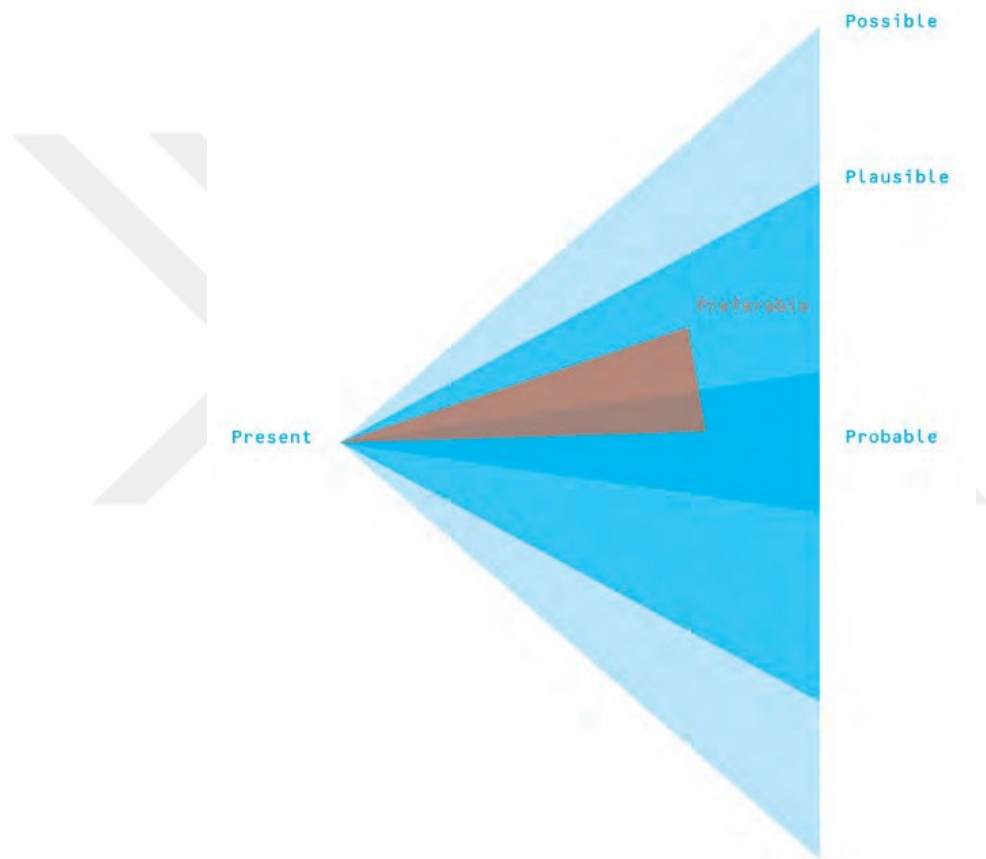


Figure 2.2 : PPPP, Illustration by Dunne & Raby (Dunne & Raby, 2013, p.5).

Thus, a speculative architect with a subjectivity takes action to rehearse possibilities and alternatives by positioning in the spectrum of alternative future. From this point of view, speculative architecture encourages a cognitive understanding, thus, nurtures visionary identities. This approach leads an architectural subject to think beyond the limits and the rules of today and open up new perspectives by acknowledging these limits and rules. Visionary one has an ‘outward facing social or critical agenda.’ By

proposing a critical vision, the speculative practice makes it possible to envision alternatives about what the world might be regarding social, cultural, technical, or economic values. So, it is based on a vision that requires a what-if question.

### **2.1.2 Diverse perspectives**

Based on these, an architect as a subject sets relations depending on or acting upon an object which exists 'out there'. Keeping the idea that a subject and an object are mediated, the subject's position is directly related to these mediated relations with the object and cannot be comprehended without the object that can be approached. In other words, it is the position of the subject with the objects that accompany it that carries the meaning.

In humanist thought, the role of the subject vis-à-vis the object has been that of an originating agent of meaning, unique, centralized, and authoritative. The individual subject enters the dialectic with the world as its source, as the intending manipulator of the object and the conscious originator of meanings and actions (Hays, 1995, p.5).

It can be considered that the object's scope can vary according to the performed activity that points what the reason, purpose, and meaning related to this existing structure an architect is concerned with, re-questions, and re-produces about. So, the object can be regarded as any formation, matter, or structure that an architect would approach for the reconstruction of both the physical and social environment, and an architect as a subject act with association to the objects inherently that he/she concerns or is responsible for originating the meaning and actions.

In parallel with this, it can be stated that dialogue is constructed between the subject and the object in the architectural design process. In this sense, the notion of parallax from Slavoj Žižek (2006, p.17) can express this relational position. It is defined as "the apparent displacement of an object (the shift of its position against a background), caused by a change in observational position that provides a new line of sight". That means a change in a subject's position towards the same existing object; that is, changing the point of view affects the interrelation between them. It is because the point of observation and the background in which the object observed would alter. The background serves as the ground that the existence of the object is determined and gains a crucial role by constituting the dialectic relations that affect the meaning. So, the tension between different standpoints of an architect creates the plurality of a perceived object. In another saying, it eventuates from the manipulation of how the

object can be perceived, so the position of an architect becomes directly crucial. So, when considering positioning as holding a point of view, attaining different perspectives allows an architect to re-questions, re-evaluate, and re-produce the existing structure continuously. It can give diversified projections that alter the perception. It promises to give more than the first perceived. It can be stated that this embodies the “way of seeing”<sup>10</sup> in a way it gives the diversity of the meaning and opportunity to reveal the hidden structures engaged with the object itself.

That means, for the thesis, the activity an architect would perform as a social actor is organized according to the architect’s own point of view. “Before we act, we rehearse possibilities and alternatives. The mind also houses the sense of who we are as individual persons. Humans have minds and selves, and these together are the sources for action” (Rizter, 2007, p.60). So, a change in observational position that provides a new point of view for an architect enables observing the possibilities and alternatives. In this way, the activity would proceed to a creative and critical process, since the actor seeks to position himself/herself according to his/her frame of mind as a source of an action and decide the background, among the possibilities and alternatives that the object takes the meaning. The meaning achieved in the design process depends on this creative and critical process.

So, the relational position of architects and the formation he would concern with proposes a dynamic process, which opens up the possibility of producing meaning. It creates the capacity to see more in the object since the meaning would differ when interrelated with another ground. Because the background that an architect prefers to see the object re-defines the meaning continuously when this relational position change. Considering architecture as a praxis, an architect as a social actor has a mission and power to introduce that meaning within architecture, managing the setting and designating the background in a purposeful manner so that the object takes the meaning. As Derrida (1998, p.571) also states that “architecture must have a meaning; it must present it and, through it, signify”. In effect, an architect has the capability of setting his/her own frames of meaning, and he/she determines the setting behind the action in the course of the design process within a spesific perspective.

---

<sup>10</sup> John Berger argues that the act of seeing is not as objective, by emphasizing the significance of the notion of perspective (Berger, 2008).

Based on this understanding, it is important for a speculative architect to observe and perceive the object discussed from different perspectives, as he/she is allowed to take a position as intended, to create his/her relative place, situation, or standing with a particular reason and purpose. He/she pursues to rehearse possibilities and alternatives by means of altering the point of view and the perception to gain diversified projections. Speculative architecture regards the predominant reality and existing structure as its object and positions an architect as an observative subject and social actor who has a mediated relationship with the object. As mentioned before, by intending manipulator of the object and the conscious originator of meanings and actions, a speculative architect strikes a speculative attitude through an informed projection. Dunne & Raby (2013, p.189) believe that speculative practice is “about meaning and culture, about adding to what life could be, challenging what it is, and providing alternatives that loosen the ties reality has on our ability to dream. Ultimately, it is a catalyst for social dreaming”. In fact, by identifying new lines of sight and behaving with ongoing reflexivity towards his/her design thinking, a speculative architect tries to reveal the frames of meaning reconstituted on different backgrounds (e.g., socio-cultural context). So, with an emancipatory perspective, he/she has the possibility to read the object in an alternative way.

It can be stated that “foregrounding the perspective” is essential for a speculative architect to point in which alternative context he/she would act (Encinas, Božanić & Šuran, 2021, p.95). In this way, he/she can take a position and ground the speculation in a really meaningful way. Speculative architecture enables to foreground an architect’s perspective by offering “a critique of the prevailing situation through designs that embody alternative social, cultural, technical or economic values” (Dunne & Raby, 2001, p.58). Having an inclusive role acting with both intellectual and architectural identity, a speculative architect reveals potentially hidden agendas and values and explores alternative design values (Bardzell & Bardzell, 2013). Thus, within speculative practice, he/she explores the possibilities and alternatives through a continuous change in perspective by regarding different social, cultural, technical, or economic contexts as different backgrounds. In other words, by grounding the speculation in prior knowledge, emerging tendencies, existing technologies, and human behaviors, he/she creates an alternative context through reflecting on and critically questioning.



In effect, this practice leads an architect to “a sort of imaginary archaeology” in terms of what the world and society could or should do. (Dunne and Raby, 2013, p.93). It employs imaginative creativity. In other words, it embodies a design approach that embraces imagination with revolutionary actions and critical thinking for trying out ideas and ideals, and it investigates an image of a possible or alternative one. For instance, this can be seen in Brodsky and Utkin’s paper architecture (See Fig. 2.3). In Nesbitt’s words (1991), “as such their work constitutes a graphic form of architectural criticism, an escape into the realm of imagination that ended as a visual commentary on what was wrong with social and physical reality and how its ills might be remedied”. Speculative architecture offers a similar attitude. “Through its imagination and radical approach, by using design as a medium, it ... can offer alternatives that are necessary in today’s world” (Mitrović, 2016, p.8). Therefore, with a socially concern attitude, a speculative architect aims to open up new perspectives through a personal projection of imagination. As Golub (2016,1) also states, he/she activates the imagination as the main instrument.

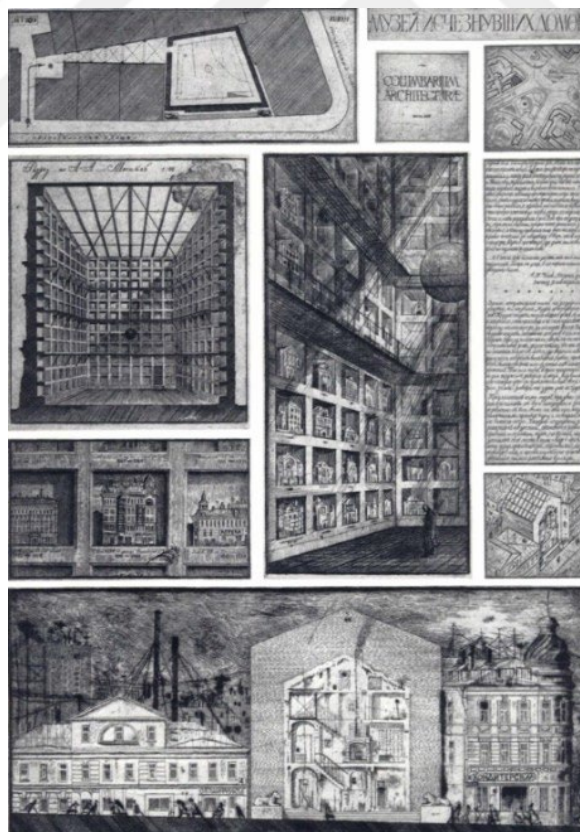


Figure 2.3 : Alexander Brodsky and Illya Utkin’s Columbarium Architecture (Museum of Disappearing Buildings), 1984/90 (Nesbitt, Brodsky & Utkin, 2003).

At this point, as a rational and socially responsible actor who performs architecture as a praxis and has an inclusive role, a speculative architect thinks interdisciplinary. With an awareness of all the alternative social, cultural, technical, or economic values of the prevailing situation, he/she is able to adopt any approach suitable in a particular situation to open the discussion. “Speculative design continuously interacts with other related practices, fields and disciplines, it uses any methodology that is accessible and appropriate at any given moment” (Mitrović, 2015, p.17). It creates an interdisciplinary, multi-layered, and experimental space for an architect by offering an interrelation with other disciplines and design practices, that is, provides broad perspective.

### **2.1.3 Critical attitude**

Within this idea, architecture could productively enlist different perspectives and projections that can multiply the moment of actions of an architect, and the architect could develop cognitive understanding and conscious intellectual activity in a way. Because it is that “moment of profound moral and intellectual crisis that produced the reflective attitude, the signifying consciousness and critical mind” and “one must, at the least, accept the necessity of this reflective moment, when architecture turns into itself to recognize its signifying nature and to search for its limits, as indispensable for any future” (Silvetti, 1977, p.277). Since praxis is accepted as a purposeful activity that comprises both the actor and actions within the process, these multiplied moments of action affect both thinking and making of an architect. When these moments occur in a systematic and conscious way, the quality of the performed activity is ineluctably improved, and “architectural design becomes a mode of research in its own right” (Scolari, 1973, p.142).

Based on all these, an architect as a subject with a socially concerned intellectual identity takes a position within a cognitive understanding and consciously acts. This brings the positional awareness of an architect, which requires him/her to know the point where he/she stands. Since positioning is akin to pointing, an architect should be aware of its focus or position, always ready to be reconstructed, that triggers diverse actions. Being aware of his/her position constructs his/her frame within a set of relationships with his/her attitude in a way. He/she develops an attitude “as a residue of past action as well as a precursor to future actions” and concerns, re-questions, and

re-produces the reason, the purpose, and the meaning related to this existing structure, by taking into consideration the meld of practice and theory (Ritzer, 2007, p.199).

In other words, since to be positioned with a certain awareness is to invoke a primary architectural moment, an architect creates that moment with a certain attitude. Thus, by 'taking a position', an architect as a rational and socially responsible actor creates a moment of action searching for meaning and sense and would perform a critical and creative act that leads not just an act of building with a tangible end product, but both invokes intellectual and architectural identity. Because the fact remains that “what characterizes architecture today is its capacity to be studied as a system of significations that establishes different levels and layers of meanings and sense” and

architecture defines its place and role in the spheres of the production of knowledge and the production of meaning, as well as in the technical production of artifacts, as being within the social practices, and that as such it can be regarded mainly as a technical-ideological practice[...] (Silvetti, 1977, p.277).

The architectural approach of Lebbeus Woods can be an example of this kind of an architect since he adopts a socially responsible attitude to explore new living conditions. He critically re-questions “a programme for social relationships established a priori” and predicts “an architecture of continuous transformation for its own sake, thereby undermining the very possibility of dogma in any form” (Woods, 1992, p.12). So, he takes an oppositional position towards spatial and temporal limits structured by architecture and creates his own setting for an experiment on social structure concerning the new information age (See Fig.2.4). Speculative architecture creates a similar opportunity for the architect to construct an alternative environment. Since it provides that space to re-questions, re-evaluate, and re-produce continuously, an architect has the possibility to set new relations based on knowledge of the world, taking into consideration the existing structure. This is like an 'alternative reading.'

Speculative design should be an informed projection that brings into question the reality we ground this projection on. Informed means that it's not about making up just any alternative future, present or past but grounding this speculation in prior knowledge, emerging tendencies, existing technologies, and human behaviours. Through creating an alternative reading – set in the future, present or past – the predominant reality is put into question and inherent biases are revealed. This is our very ideal understanding of speculative design (Url-16).

Speculative architecture, thus, leads to a reflective and critical mind. The critical and creative attitude is the primary act of this practice since it is embodied the idea that

“design as critique can do many things—pose questions, encourage thought, expose assumptions, provoke action, spark debate, raise awareness, offer new perspectives, and inspire. And even to entertain in an intellectual sort of way” (Dunne & Raby, 2013, p.43). The aim of this critical and creative attitude is “not to fulfill a need or to intervene in a given situation or state: it is to provoke, to stimulate a conversation” (Bardzell, Bardzell, Forlizzi, J., Zimmerman, & Antanitis 2012, p.294). For example, in the case of Fun Palace, Cedric Price adopts that provoking attitude with the proposal “primarily there to respond to the changing needs and desires of individuals, not to house prepackaged exhibits and events for a generalized public” (Mathews, 2006, p.40). He points out a problem with the normative architectural practice (See Fig.2.5).

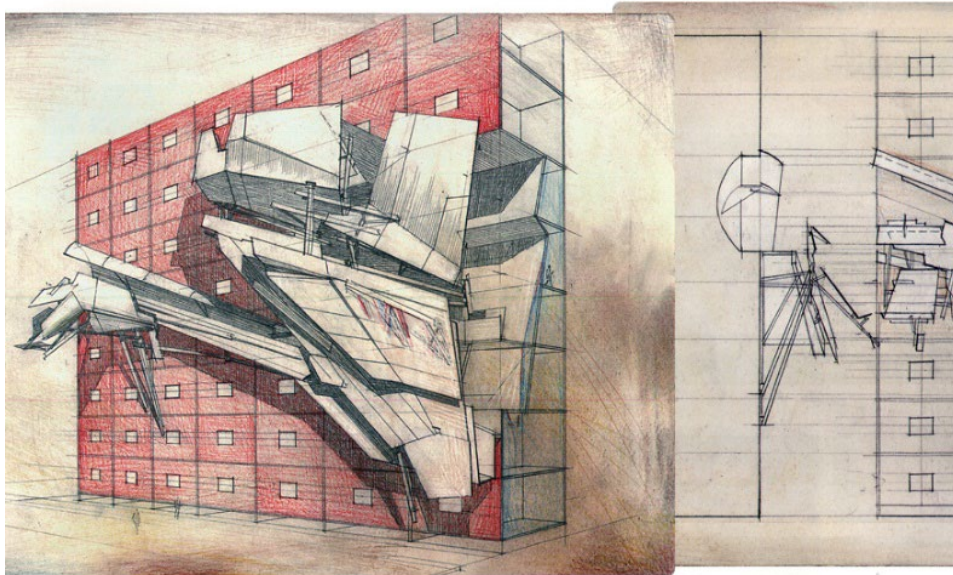


Figure 2.4 : Lebbeus Wood’s “War & Architecture” (Url-17).

In parallel with that, with an expression from the manifesto of speculative design consisting of comprehensive and categorical definitions of foundational terms, speculative architecture similarly puts emphasis on ‘problem finding’ more than ‘problem-solving’ and also ‘design for debate’ more than ‘design for production.’ While highlighting “the need to develop an intellectual basis – and thus a role for research–”, Mazé & Redström also says;

the critical practice makes the ground for an architect “not only for improving the design as ‘problem-solving’, but in creating a space for designers to reflect upon the ideas, theories, logics, and implications of design in and through practice. That is to say, the intervention of an intellectual basis for ‘problem-finding’”. (2009, p.32).

“The very idea of a shift from problem-solving to problem-finding also opens up for a research attitude that relates in some ways to contemporary thinking of philosophical practice and conceptual analysis” (Grosz, 2001).

So, it can be said that a speculative architect acts on an intellectual ground and is interested in developing a perspective towards the world in a critical base to find problems, debate, and explore a broader space of possibilities by means of re-questioning, re-evaluating, and re-producing with ethical positioning. He/she is the disquisitive subject who needs to research based on critical thinking motivated by intentions and takes an oppositional and resistant position for provocative purposes within intellectual creativity. As Liam Young (2014) also emphasizes, “cast as a provocateur and storyteller, the speculative architect instigates debate, raises questions”.

Critical design is a design research practice that foregrounds the ethical positioning of designers; this practice is suspicious of the potential for hidden ideologies that can harm the public; it optimistically seeks out, tries out, and disseminates new design values; it seeks to cultivate critical awareness in designers and consumers alike in, by means of, and through designs; it views this activity as democratically participatory (Bardzell & Bardzell, 2013, p.3302).

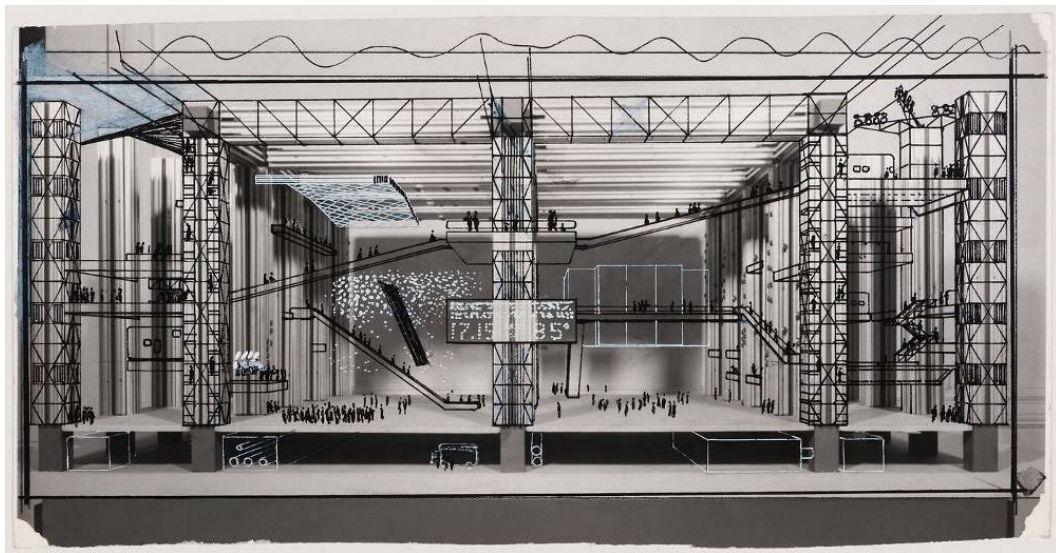


Figure 2.5 : Cedric Price’s Fun Palace, 1961 (Url-18).

In the end, encouraging one to take a skeptical, critical, observative, designerly, resistant position and research attitude, speculative architecture leads the way for an architect to gain a unique identity, which distinguishes himself/herself from others. This knowing and conscious identity act with a critical sensibility that is “simply about

not taking things for granted, to question and look beneath the surface” (Url-19). So, speculative architects have a diverse identity to question what is given and discuss the change and transformation with a critical sensibility from different perspectives and projections by thinking beyond the limits of architecture. As Liam Young believes:

The architectural profession will have to diversify. A speculative architect will tell stories about possible futures, and there will be architects as politicians, urban planners, tech company executives, researchers, writers and performers. The change is just an expanding role of the discipline (Url-3).

## 2.2 Discourse

An architect is one who has an active knowledge of ethics and aesthetics, as well as technical matters, and is skilled in embodying these in precise forms and spaces. Further, an architect is able to make designs that integrate these into the fabric of a city or town or landscape, harmoniously or not, but in any event according to a critical position taken by the architect. To do this, an architect must have a developed understanding about the way a city or town or landscape works and also how it should work, given the right conditions. An architect works to maximize these conditions. Therefore, an architect must have a wide and comprehensive knowledge of the world he or she inhabits, however large or small its extent, in order to have a clear idea of the best conditions to enable and encourage (Url-20).

An architect who performs architecture as a praxis constructs his/her theory to understand the way the world and its social dimensions work and re-developing issues of existing economic, social, or political formations within a specific practical and theoretical knowledge, and he/she develops his/her architectural design around this theory. By regarding the relationship between architecture and the social entity, he/she evaluates the design activity as a way to re-transform social and physical context by fostering both the theoretical and practical qualities of architecture. In a way, he/she intends to relate between thinking and making activities of architectural praxis by developing a socially concerned theory that involves the knowledge.

Thus, the theory here can be considered as developing a discourse that seeks the way to the transformation of the existing structures when discourse is understood as the organization and manipulation of knowledge, as Foucault defined. For Foucault, discourse is like an ‘archaeology’ of knowledge that indicates a research domain, and it is the way language is used for social reasons (McHoul & Grace, 1997). From this point of view, it can be stated that developing a discourse enables a way for understanding and re-evaluating substantive and often debatable issues in an urban

context, where social transformation is the fundamental goal and desired outcome. As Teyssot (1977, p.301) says, “the discourse only makes itself felt within a context that is provided by a network of interactions combining various levels of action and transformation”. So, a socially concerned architect develops a discourse with the purpose of critical actions on development by raising questions and encouraging debate. Since “a statement belongs to a discursive formation as a sentence belongs to a text, and a proposition to a deductive whole,” he/she develops ‘a group of statements’ by means of the power of language to question and discuss (Foucault, 1972, p.130). In this way, he/she assigns a role for architecture in discursive fields since “discursive fields evolve during the course of debate about contested issues and events” (Snow, 2009, p.1781). Also, his/her design activity begins to be evaluated as a theory-based social action based on statements in the way of re-evaluating the existing and exploring the non-existent, and this action leads to his/her architectural design.

Given that there is architecture’s capacity to develop an understanding of the world and society and to be a discursive practice that can reproduce the existing knowledge by dealing with theory and practice as connected entities, the thesis argues that speculative architecture brings back its discursive role. Since “it is rooted in the critical and reflective thinking and discussion” with the purpose of social transformation within a certain practical and theoretical knowledge, speculative architecture can be evaluated as a discursive activity (Helgason, Rosenbak, Smyth, Mitrović, 2015, p.2). In a way, intending to stimulate critical reflection and new ways of thinking to challenge the existing, it encourages a design understanding engaged with ‘the organization and manipulation of knowledge.’ Thereby, it can be stated that it critically acts in a discursive context.

Speculative design asks questions about the future and offers some alternatives that are essential for the world of today, but more importantly, the world of tomorrow. It is a discursive activity founded in critical thinking and dialogue (Mitrović, Hanna, Helgason, 2021, p.69).

### **2.2.1 Critical thinking**

Thought is the prime instrument of statements for an architect while developing his/her discourse, and language is its vehicle. Here, thought serves the purpose of a social action integrated with the produced knowledge. According to Aristotle (1999, p. 87), “thought by itself moves nothing; what moves us is goal-directed thought concerned with action. For this thought is also the principle of productive thought. So, with the

goal of transformation for the physical and social context, the thought of an architect is a part of a productive process that makes it possible to organize and manipulate knowledge. In a way, this can be considered a thought experiment that is responsible for the construction of the set of statements. So, within this productive process of thought experiment, an architect generates specific knowledge with a certain practical wisdom.

It can be stated that this kind of experiment is 'in service to the idea.' In other words, an architect builds up the idea that any interpretive, experiential, social, and architectural factors intervene by expressing the thoughts and articulations of the statements. He/she grounds the design on these ideas produced through the acts of thinking critically. "Foucault regarded discursive formations as having a constitutive function: discursive practices make subjects by delimiting the boundaries of what it is possible to think" (Farrar, 2007, p.1776).

The search for a new or alternative reality as a goal during the design process carries the concern of producing meaning in the physical and social context. Since meaning can only exist in a network, in relation to other things, an architect explores his/her own meanings by critical thinking without ignoring the importance of architecture in the socio-cultural context and its correlations. In effect, meanings vary depending on how an architect develops his statements, how he uses language as an instrument, how he constructs his thoughts, and how all of these serve for ideas while re-establishing the relation between architecture and the social entity. These are essential parts of the creative process and the social action.

As speculative architecture offers a research space for thinking on a critical base by means of posing thoughtfully crafted questions, it offers a discursiveness for an architect to understand and re-evaluate the substantive issues of the world and to envision alternative present or speculative future. This kind of discourse aims to search for the boundaries of what it is possible to think. Endorsing this, DiSalvo & Lukens (2009, p.1) state that "speculative design is driven by issues or curiosity rather than needs, and the objective is less the production of an operational system than the investigation and expression of potential futures". So, speculative architecture encourages developing a discourse to examine various possibilities and often discuss provocatively rather than only to describe and affirm. At the same time, a speculative



architect has the possibility to invigorate a social action by adopting a discursive form of architectural expression within the critical dialogue.

The approach of Antonio Sant'Elia, a futurist and almost entirely 'paper' architect in the 1920s, presents an example of such social action by inferring the power of ideational production with his social, political, or literary manifestoes like 'Manifesto of Futurist Architecture 1914'. Speculating in his manifesto about the future scenario of the urban layout, he claims that "we must invent and rebuild the Futurist city: it must be like an immense, tumultuous, lively, noble work site, dynamic in all its parts; and the Futurist house must be like an enormous machine" (Apollonio, 1973). Speculative architecture encourages that kind of practice of critical thinking. It means that the exploration and discussion are conducted through the design process, where critical thinking is the prime instrument for asserting the architectural expression.

Speculative architecture puts forward critical thinking embedded in this sort of design understanding, because "design as critique can do many things—pose questions, encourage thought, expose assumptions, provoke action, spark debate, raise awareness, offer new perspectives, and inspire," (Dunne & Raby, 2014, p.43). Its primary purpose is to develop new modes of understanding through the instrument of critical thought. "Critical thought is in service of social change, from the present to a hoped-for future that is attainable but not immediately within reach" (Bardzell & Bardzell, 2013, p.3304). From this point of view, by promoting critical thought in the design process, speculative architecture aims to explore, examine and provoke action in hopes of bringing about social transformation with a particular awareness. Since it adopts an understanding that works as a 'thought catalyst,' it assigns a discursive role to the design, stimulating the modes of critical thinking.

With this understanding, Dunne & Raby (2013, p.80) treat design speculations as "thought experiments—constructions, crafted from ideas expressed through design—that help us think about difficult issues". In a way, thought is the prime instrument to speculate for the goal of meaningful action. Speculative architecture encourages thought experiments which is a productive process as it is in the constant investigative and performative phase, exploring and articulating new ideas and ideals. By positioning critical thinking within the design, it puts a design understanding forwards as 'a thought catalyst'. It transforms design into a subtle and exploratory field.

Accordingly, the reason behind the design that realizes itself as a subtle and exploratory field is to search for conscious ideas and thoughts in the way of possibilities affecting people's lives. In other words, speculative practice contributes to launching competing ideas that are exploratory and suggestive of what might be "rather than a mere description of what is or a normative prescription of what should be" (Mazé & Redström, 2009, p.33). Where the articulation of ideas might be possible, speculative architecture can act as a critical and social practice that is a way of knowledge and meaning production and transmission in hopes of bringing about social transformation. Because "in order to position a critique within design, or of other domains by means of design, a certain basis for exchange of ideas must be established" (Mazé & Redström, 2009, p.29). Therefore, as mentioned before, there is a concern about building up a certain ground for compelling ideas that any interpretive, experiential, social, and architectural factors intervene. This ground which works as a matrix of ideas stimulates the process of thought experiments 'in service to idea' in and through the design process.

From this viewpoint, speculative architecture offers a space to build a new context for design, along with today's reality, where the questions light the way to critical thoughts. In a sense, a speculative architect needs to consider the environment or context in which his/her speculative proposal would exist and define it for debate. Since "in critical making it is the act of creation, fabrication, and contextualization or discussion is the central focus", he/she needs to express his/her desired reality in the way of 'creation, fabrication, and contextualization or discussion' (Galloway & Caudwell, 2018, p.89). It should be underlined that he/she does not set out with the goal of a completely different world. When constructing his/her own reality, he/she does not sever all ties with existing reality. "Good speculations stretch rather than shatter the coordinates, ensuring plausibility and in turn eliciting a powerful level of audience reaction" (Smyth, Auger & Helgason, 2021, p.28). With this understanding, speculative architecture believes that design speculations come out with the points stretched in reality. Thus it can be possible to obtain a new environment that leads an architectural design. In a sense, "by separating something from its ordinary context, speculative design emphasizes some aspects of the problem" (Malpass, 2013, p.345). Michael Smyth, James Auger, Ingi Helgason also explains this understanding with a diagram (See Fig.2.6).

These “coordinates” (A in diagram) typically relate to the individual, social, cultural, political, historical, technological, and scientific dynamics of contemporary life. Speculations typically focus on one particular aspect and extrapolate this to create a modified version of the world or artefacts and evidence from this new version. The vector that drives the extrapolation acts on behalf of particular agendas or interests – these shape the imaginary (B in diagram) with the ultimate aim of attempting to influence (aspects of) the future world (C in diagram) (Michael Smyth, James Auger, Ingi Helgason, 2021, p.28).

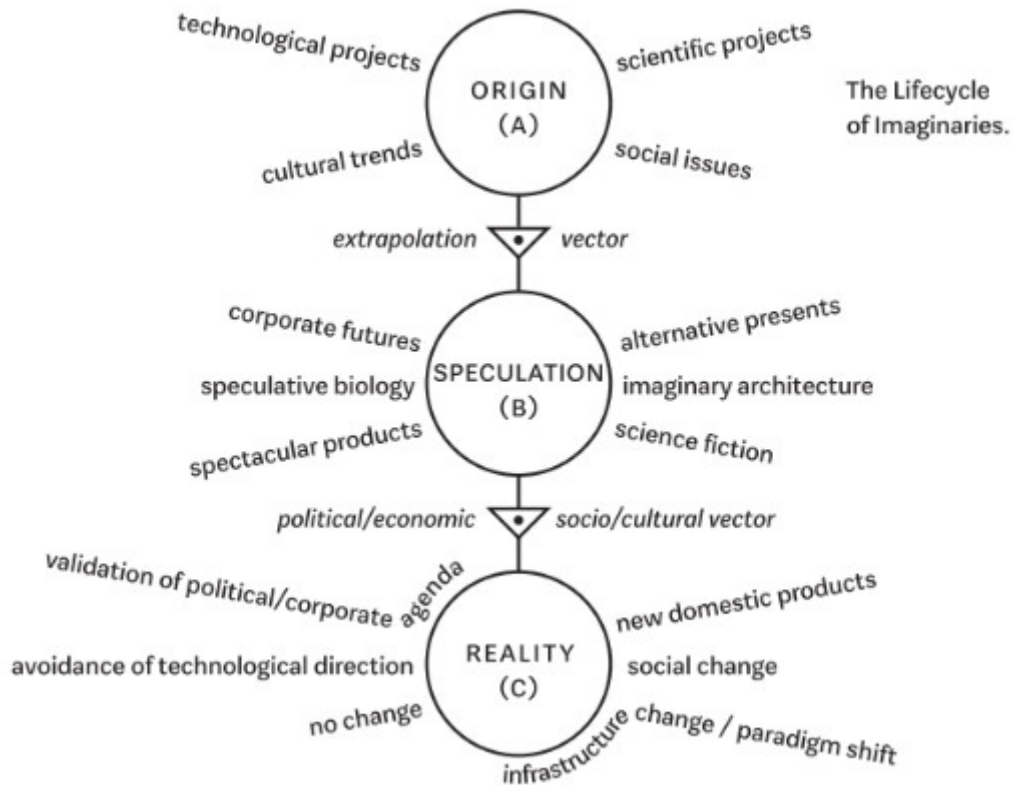


Figure 2.6 : The Lifecycle of Imaginaries (Smyth, Auger & Helgason, 2021, p.27).

Therefore, a speculative architect develops a research attitude that makes him/her able to strategize, establish complicated cause-and-effect relationships, organize and manipulate knowledge, and more. That attitude provides to construct of a ground entrenched in conscious ideas and thoughts in a critical base. From this perspective, it can be stated that this ground is a tool for questioning and facilitating debate with a discursive form of architectural expression as a critical means. In addition, since the purpose is ideating and expressing the unthinkable based on ‘what if’ questions, design speculations as thought experiments also create deeper conceptual understandings.

### 2.2.2 Conceptuality

I examine [...] architecture as a specific kind of socially symbolic production whose primary task is the construction of concepts and subject positions rather than the making of things. It is thus an architectural impulse or attitude that I seek to characterize, and a certain kind of attention is needed to detect it: specialized theoretical techniques and methods must be brought to bear on this subject. Nevertheless, I hope to suggest too that the architectural impulse is part of daily social life and its wide-ranging practices (Hays, 2010, p.1).

Hays emphasizes conceptual possibilities of architecture which is in charge of developing a set of thoughts (concepts) within design activity together with the practical ones. Architecture can produce a conceptuality with specific theoretical techniques both by itself and in relation to wide-ranging practices. When theory's vocation is considered "to produce the concepts by which architecture is related to other spheres of social practice," it can be stated that the productive process of developing a discourse is brought out that conceptuality (Hays, 1998, p. xii). Employing idea development and thought experiment, the conceptuality that refers to the understanding of the reality of an architect emerges, and in a way, this conceptuality helps to ground his theory on the social and physical context.

The more concepts and ideas formulated by the architect have an immediacy for contemporary conditions of living, thinking, working, the higher we will value it as architecture. We want architecture to participate in the crucial changes affecting our lives, and not simply form a backdrop to them (Url-21).

So, architecture as a praxis gains an essential role in the re-production of 'concepts' in the related context.

In this way, a responsible architect can develop discourse and a critical architectural understanding and ideology that cannot be evaluated as just a seeking for a final object but searching for an idea and thought in the way of crucial changes affecting our lives. In other words, the instrument of an architect's design process cannot be merely architecture but also thought. With the conceptual background of architecture, he/she can question and critique the existing and create new or alternatives in the way of acquiring knowledge and meaning. As Lebbeus Woods also claims when he/she describes architecture as 'a concept', "architecture is the built realization of a particular concept or idea" and "it embodies conscious ideas about human habitation and its meanings" (Url-21; Url-20). Considering this fact, developing discourse in the design process enables evaluating architecture as a form of knowledge and meaning

production and transmission, along with “the matrix of ideas, concepts, and designs that serve as inspirations for constructions that can be inhabited” (Url-20). Thus, with a discursive form of architectural expression as a critical means, an architect can have the possibility to stimulate the architecture act as a social practice.

For Dunne & Raby, as they identify in the manifesto of speculative design that consists of foundational terms, speculative practice embraces conceptual design—design about ideas. They believe that “in design, people often struggle to get beyond the concept to appreciate and engage with the ideas. It is at the level of ideas that the craft of conceptual design happens. Ideas are constructed or found, evaluated, combined, edited, tweaked, and embedded” (Dunne & Raby, 2013, p.15). In a sense, they propose a role for design to be a richer conceptual space. Besides, as Mazé & Redström (2009, p.32) points out that “engagement with that conceptual realm of design and, thereby, potentially also contributing to the development – through critique and counterproposals – of theoretical frameworks proper to design” is important for such a critical practice. Based on the admission of the conceptual possibilities of architecture, speculative architecture engages with this understanding that provides a space for thinking about how things could be by endeavoring to bring out that conceptuality. This conceptuality that keeps company with the design of an architect supports the development of new understandings, acts as a form of critique, and helps to speculate.

In addition, they especially underline that “such concepts become not only external or retrospective descriptions of design objects, but an integral part of the design objects as such” (Mazé & Redström, 2009, p.32). It means a speculative architect constructs his/her conceptual space not just as a medium to express the design but as a core element that works as a critical lens in and through design. By locating the conceptual terms in an alternative present or speculative future, he/she can have the possibility to search for implications of design in the related context. At this point, it should be stated that speculative architecture fosters this conceptuality with an interdisciplinary framework and has the potential to engage also in other concepts and theories. In other words, the conceptual space stands to benefit from various fields like ecology, economy, sociology, philosophy, and more. It is because “if such a practice only evolves in relation to concepts central to its own domain, theoretical frameworks would never extend beyond, e.g. notions of taste, good design, or functionality” (Mazé

& Redström, 2009, p.32). In this sense, speculative architecture encourages an inclusive theoretical framework interested in all alternative social, cultural, technical, political, economic, or ethical values, and it promotes an understanding involving a ‘multitude of worldviews, ideologies, and possibilities.’

Speculative design attempts to anticipate the future and at the same time helps us to re-think the present. Speculative practice moves away from the consumerist role of design and uses speculation about potential futures and design as a medium to challenge current social, economic and political relationships as well as our relationship with the natural environment. It also intends to move beyond the role that design has in presenting market-ready solutions and attempts to restore design’s foundations, such as discursiveness (analysis, reflection, examination of various possibilities, anticipation and so on) (Mitrović, Hanna, Helgason, 2021, pp.69-70).

With this understanding, the conceptuality on the occasion of the underlined discursiveness is related to the reality that an architect wants to emerge. That altered reality that speculative architecture asks for is created within the boundaries of that conceptual space. Considering the idea that “design speculations can act as a catalyst for collectively redefining our relationship to reality,” the ultimate concern is to search for the possibilities instead of accepting the current state of affairs as the sole option, through what-if questions and by changing the perspective on specific conditions or situations (Dunne & Raby, 2013, p.2). In other words, speculative architects ask questions without seeking an answer and try to transform reality. For example, he/she asks; ‘what may happen’ if this topic is incorporated in design in the light of a scientifically developed future or present; what ‘could happen’ if this topic was brought to the agenda to make a change in the social or physical environment; ‘what will likely happen’ if some development for this topic leads a radical change in society; what do we ‘want to happen’ if there is a chance to make the world desirable through this unusual scenario. These questions light the way to critical thoughts, full of gaps. It is an experimental and productive process; both questions, thoughts and their conceptual possibilities are open to change. Within this perspective, an architect delimits his/her boundaries of thinking, and ideas emerge in line with the possibilities of his/her own thought. Therefore, his/her design activity needs to stimulate conceptual possibilities based on knowledge in order to construct his/her theory.

### 2.2.3 Speculative theory

Theory is a practice explicitly ready to undertake its selfcritique and effect its own transformation. And, like architecture itself, theory is an appetite for modifying and expanding reality, a desire to organize a new vision of a world perceived as unsatisfactory or incomplete—such will always be architecture theory’s proper utopia” (Hays, 1998, xiv).

It can be said that developing a discourse during the design process can be considered “a creative practice used throughout to make sense of lives and culture, to theorize, and to produce knowledge” (St.Pierre, 2007, p.5304). In this way, an architect can develop his/her architectural design over his/her socially constructed theory that constitutes a new vision for the world over produced knowledge embodied meaning sought, together with substantial ones.

Together with his understanding of the theory that points to an intent to alter reality, Hays (2010, p.1) also evaluates “architecture as a way of negotiating the real”. In parallel with his words, it can be stated that the set of statements, thus discourse, can be a way to create reality instead of to mirror or represent it. From this point of view, an architect can also evaluate the external reality as fragments that he/she can set new relations between or build a new unity over from. Also, “reality is fragmented and saturated with difference, and language is a key way of understanding this fragmentation” (Ramji, 2007, p.1154). In fact, by performing architecture as also a discursive practice, the intellectual architect acts with the concern of exploring the alternative or possible reality. It is crucial for him/her to understand the existing structure and organize a new vision of a world, and the language and the thought serve to keep the communication going that leads to a transformation of the context of reality. Actually, the boundary of his/her thought carried out as a productive process indicates how much an architect would achieve that.

Speculative architecture is directly related to developing a relation between design activity and its theoretical discourse, not for describing but for understanding and generating new thoughts. To underline that, Dunne & Raby (2013, p.88) evaluate it as “a theoretical form of design dedicated to thinking, reflecting, inspiring, and providing new perspectives on some of the challenges facing us”. As Miessen (2007, p.160) also believes, this provides “a way of dealing with theory and practice as connected rather than separate entities. The unbuilt proposal and its discourse somehow exist as theory”.

At this point, it can be stated that speculative architecture cultivates theoretical frameworks of design that an architect is responsible for constructing. The role of theory in this practice is speculative as it tries “not to explain what is known but to challenge us to see in new ways, to generate new modes of engagement or ideas” (Bardzell & Bardzell, 2013, p.3302). In other words, it intends to change the world by building new understanding instead of describing it. It diversifies ways to understand and enhance the prevailing situation to offer an alternative response to complex urban problems. So, the theory is speculatively introduced in the design process to think about what is possible for radical change. According to Mazé & Redström (2009, p.35), “rather rote replication or systematic application, the theory might operate as the intervention of ‘radical doubt’ and ‘tactical improvisation’”. Theory as speculation departs from this idea, and it offers a critical activity in which ‘radical doubt’ and ‘tactical improvisation’ are embedded. As Bardzell & Bardzell also claim when discussing what makes criticality in a design project;

“a design research project may be judged “critical” to the extents that it proposes a perspective-changing holistic account of a given phenomenon, and that this account is grounded in speculative theory, reflects a dialogical methodology, improves the public’s cultural competence, and is reflexively aware of itself as an actor—with both power and constraints—within the social world it is seeking to change (Bardzell & Bardzell, 2013, p.3304).

In fact, speculative architecture, which foster critical thought, aims to construct a speculative theory for developing perspective-changing understandings and statements attempting to alter the social environment. Mitrovic (2015, p.15) while evaluating the speculative practice, states that “through its imagination and radical approach, by using design as a medium, it propels thinking, raises awareness, questions, provokes action, opens discussions, and can offer alternatives that are necessary in today’s world”. To give a historical reference, for example, Japanese Metabolists Kiyonori Kikutake and Kisho Kurokawa offer a speculative theory while recreating the total image of the city for their alternative context in their ideas of Marine City and Agricultural City. They claim that, in Kikutake words, “unlike the architecture of the past, contemporary architecture must be changeable, moveable and capable of meeting the changing requirements of the contemporary age. In order to reflect dynamic reality, what is needed is not a fixed, static function, but rather one which is capable of undergoing metabolic changes” (Stewart, 2002). They propose their new social environment with their outstanding understandings to propel thinking. Speculative architecture contains



this kind of understanding. In this perspective, a speculative architect is dedicated to transgressing to suggest an alternative context engaged with new ideas and ideals in the way of constructing his/her own speculative theory.

In a way, by repositioning theory and criticality in relation, he/she acts with a constructive and projective attitude in the design process. It means that by promoting further development or advancement in hopes of bringing about social transformation, he/she is apt for speculating with a revolutionary approach for alternative possibilities based on the present structure with the benefit of all areas in life, including life sciences and social sciences. Thus, considering that the construction of his/her theory is speculative, it can be stated that this theory functions as a lens to structure his/her design thinking, which makes it possible to demonstrate a constant state of reflexivity to architectural design. Besides, it leads to a socially concerned design process relating to thinking and making activities of architecture.

With this understanding, speculative architecture seeks an intellectual base that can challenge existing knowledge for practical action. This kind of design “needs to establish an intellectual stance of its own” by considering the relationship between architecture and the social entity (Dunne & Raby, 2001, p.59). So, attempting to construct a theory, in a way, developing a discourse, offers a role for research in and through the design process to develop an intellectual basis. In Dunne’s words (2006, p.20), it is “a form of social research” whose primary purpose is to produce knowledge grounded in prior ones. It operates at the intersection of design and research and fosters intervention of an intellectual basis in the way of the social construction of knowledge. This requires thinking beyond time and beyond the boundaries of the discipline. Like Yona Friedman did in the 1960s (See Fig.2.7). As Friedman (2001) believes for architecture, “by the late 1960s, it had little to do with aesthetics anymore, but with politics, sociology, event, linguistics, technology, standardization...”. His intellectual stance reflects in his architectural approach. Speculative architecture takes inspiration from such a mindset, and it creates a space where the design process might be equated to a research methodology in which intellectuality gains importance by leading the way for the intertwining of generative, propositional, and discursive modalities. Therefore, it can be stated that speculative architecture attaches importance to intellectual inquiry to adhere to a path that critical thinking forms.

Considering this, developing discourse for the thesis can be characterized as a systematic inquiry carried out through the careful management of speculation. For Ward (2021, p.189), speculative practice “is positioned as a practice-based-research; a mode of inquiry designed to discover and imagine new insights and opportunities”. He adds with Grand & Wiedmer’s words, it implies “a reflection of the contingencies of our world today, and of the practices for creating, imagining, and materializing new worlds” (Grand & Wiedmer, 2010). So, a speculative architect realizes his/her design thinking at the heart of the inquiry in hopes of bringing new understandings to the surface. In another saying, by developing a research attitude, he/she critically thinks about an alternative present or speculative future through the landscape of ideas and ideals. DiSalvo and Luken (2009, p.2), who also characterize it as an approach that emphasizes inquiry, claim that “speculative design has the opportunity to imagine and explore possibilities, without the necessity of delivering actionable plans towards those possibilities. It is thus exploratory and suggestive of what might be”.

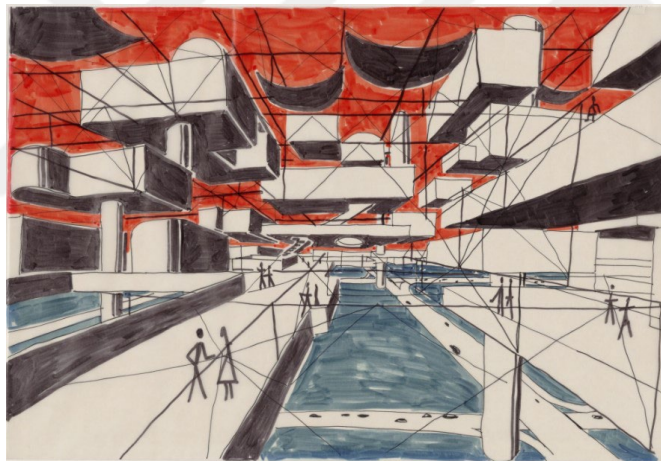


Figure 2.7 : Yona Friedman’s Spatial City Project (Url-22).

Consequentially, speculative architecture as a discursive activity leads the way to research in the physical and social context, with the ability to produce critical thought that “frequently works in the other direction, combining a literary detail, an experiential effect, a historical detail, and a speculative theory together to produce a unifying account” (Bardzell & Bardzell, 2013, p.3303). The discursive quality in the design process facilitates an opportunity to examine fundamental paradigms based on observations, explorations, and speculations. In the end, speculative architect constructs his/her focus or intellectual ground by adopting a discursive form of

architectural expression within the critical dialogue to design with the points stretched in reality in favor of all kinds of science.

### **2.3 Production**

The internal connection between ‘idea’ and ‘vision’ or ‘visual aspect’, as Greek philosophy<sup>11</sup> indicates, can be evaluated as a substantial part of the design process in architecture. “In the writings of such Renaissance figures as Alberti and Vasari, for example, the Italian word ‘disegno’ signified both the idea and its visual expression” (Ingold, 2013, p.71). From this perspective, architecture's capacity to bridge ideas and visuals implies a continual dialogue between an architect’s mind and his/her productions. As Beatriz Colomina (2005, p.207) also states that “architecture, as distinct from building, is an interpretive, critical act”, which “present in the different modes of representational discourse: drawing, writing, model making and so on”. So, based on this, an architect produce as an interpretive, critical act regardless the medium. When architecture is evaluated as not just a meta-production activity but also as the production of thoughts and their visual expression, an architect creates a place to produce for transforming his/her conceptual ideas into diverse sets of associations and visual qualities and vice versa. In a way, visual aspects are related to how ideas are embodied and also serve to think and lead to new ideas in the design process. This can be considered “a rational mode of reasoning, characterized by systematic exchanges between conceptual and figural arguments” (Goldschmidt, 1994, p.158). It can be said that [as the thesis claims] this continual co-constitution enables the possibility of constructing relations between the positioning and constructed discourse of the architect and his/her production in a critical and creative way.

Evaluating architecture as a critical and creative act instead of coming up with the final outcome and solution for a specific problem, speculative architecture stimulates a production process that “favor inquiry, experimentation, and expression” (Lukens & DiSalvo, 2012, p.33). It means that it adopts the understanding of ‘design as a medium’ to speculate with instead of ‘design as a solution,’ thus giving space for inquiry for exploring the new and alternative possibilities through design which signifies both ‘the

---

<sup>11</sup> Originating from the ancient Greek philosophy, idea, or eidos, has been linked to “vision” or “visual aspect” (Edwards, 1972).

idea and its visual expression'. Just to be clear, the focus of speculative architecture is to research through design that involves "the idea of possible futures and using them as tools to better understand the present and to discuss the kind of future people want" and "the visual expression of what needs to change if we are to develop new ways of existing based on new values" (Dunne & Raby, 2013, pp. 2-182). In a way, a speculative architect acts at the heart of the inquiry to open up new worlds and new ways of being while designing by his/her productions.

### **2.3.1 Critical vision**

The unique way an architect projects the idea and its vision onto the same plane and brings them into being in a particular context in a meaningful way constitutes the quality of his/her production. The visualization strategy that nourishes the capacity of the architect's mindset and fosters this co-constitution between the idea and vision is determinative. These strategies become the action of the design process and act as productive tools, techniques, or methods that regulate specific relations with all design constituents for exploring the different alternatives in a systematic way in the whole design process. So, since the design process's actions are shaped by its media's dimensionalities, engaging with any accessible mediums of the time is necessary. "As our tools change, they challenge not only the production of architecture, its design and manufacture but also profoundly the thinking of architecture, its concepts and its language" (Thomsen & Tamke, 2009, p.344). In this perspective, as a social actor keeping up with the times, it is inevitable for an architect to develop his/her strategies by overlapping today's media, not just from the discipline of architecture but also belonging to other fields. In fact, it is a necessity of the design process that depicts a creative process to get information and inspiration from all kinds of sources to give abstract thoughts a concrete existence.

Moreover, as Stan Allen (2000) indicates, the visualization strategies work in the interval between thought and thing. In fact, they determine the architect's form of inquiry during the whole design process by acting between thought and thing. In a word, visualization strategies play a fundamental role throughout the design process for an architect who is a creative and critical researcher as his/her productions become part of their observations, explorations, and speculations.

With mutual interaction and transformation of the design idea and the design object, architectural research becomes an integral part of the architectural design process. In this sense, in the architectural design process, there is an ever-changing relationship between design ideas and their external representation. The idea and realization of the design always transform each other (Caglar & Oztoprak, 2020, p.132).

This systematic inquiry is fed by the cycle between the materialization of an idea and the generation of an idea, where the conceptual things become figural and figural things can serve to emerge conceptual ones (See Fig.2.8). “The interaction between generation and materialization of a design idea enables the generation of greater numbers of potentially more useful and novel ideas” (Georgiev & Taura, 2015, p.354). In a way, this interaction enables open-ended productions to think, navigate through a set of possibilities, foresee the potentials and create, not just represent. Furthermore, this inquiry "fosters a free exploration while demanding the selection and organization of creative ideas" (Camere, Schifferstein & Bordegoni, 2018, p.54). This exploration cycle highlights an enhanced creative and intellectual design process that does not target a final point. In this sense, this perspective of inquiry which occurs through the interaction between generation and materialization of an idea, is the substantive part of the explanatory and generative design process.

We assume that in this interaction with materialized ideas, natural human characteristics such as curiosity and imagination facilitate the discovery of new features, uses, functions, or contexts. The interaction with materialized ideas can enhance creativity through such characteristics (Georgiev & Taura, 2015, pp.356-357).

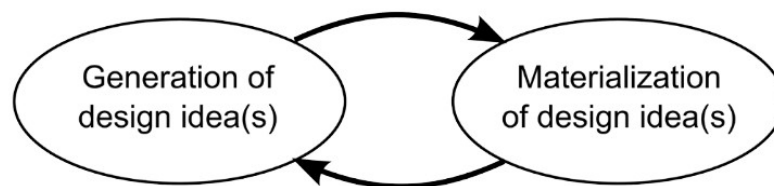


Figure 2.8 : Exploration through generation and materialization of design idea(s) (Camere, Schifferstein & Bordegoni, 2018, p.54).

From a similar perspective, Steven Holl (2000, p.175), who sees architecture also as an open-ended field of inquiry and calls this process an “abstract journey,” emphasized the importance to doubt the validity of our ingrained opinions, ideals and views and claims that “allowing different possibilities in architecture requires opening up thought... working with doubt”. So, this interaction between generation and

materialization of design ideas enables an architect to work with doubt, explore alternative design directions, and avoid idea fixation.

Defining these concepts is essential to comprehend this interaction. The materialization of design ideas here can be evaluated as the process of making conceptual intentions explicit through concretely formalizing them on an external medium at some point. It is a way to embody the design ideas and consolidate or provoke them. The generation of design ideas here is related to re-engagement with the materialized ideas as visual expressions as a starting point for a new idea. It is a way of developing them into more refined and innovative ideas, in a way, producing thought on unexplored opinions, ideas, and views. In this respect, the process involves the production of thought via visual imagery and the production of visuals via mental ideas.

In this respect, since “speculative design requires a critical mindset and the ability to connect dots and look at the world differently,” there is a need to propose a ‘critical vision’ co-constituted with the ‘critical idea’ (Url-16). In other words, speculative architecture as a critical practice requires to be engaged with a critical expression of all the concerns the design attaches importance to in the whole process of production to be able to explore ‘the alternative possibilities and options, and imagining and redefine our relation to reality itself.’ Therefore, all productions become discussions on their own imbued within a design process, creating a space for an architect to re-question, reevaluate, and re-produce the knowledge, idea, and design itself. So, there is a complexity inherent to the processes of creating the design. As Encinas, Božanić, & Šuran (2021, p.163) emphasize, “a complexity that is a consequence of the multiple and sometimes contradictory tensions that speculative designs more or less explicitly address”. They believe:

The processes of creating designs can encourage interrogation of prevailing assumptions and invite exploration of other, alternative states of being and doing. These activities can lead to a deeper understanding of, for example, the contextual, political and cultural factors that influence the activity of design, and in turn, consideration of the potential implications and effects caused by bringing new products and services into the world (Encinas, Božanić, & Šuran, 2021, p.163).

From this perspective, speculative architecture allows a deeper understanding of all the concerns a socially responsible and critical-minded architect discusses through the

production process by encouraging architectural conception integrated into all the factors. Therefore, the productions so the discussions are multidimensional and continuous to critically search regarding all design components. For instance, through and with his/her productions, a speculative architect can try to find new perspectives on the problem, reflect his critical attitude towards it, develop an appropriate understanding of his position, conceive the context where the design happens, or seeks to explore a new way of seeing that can give the diversity of the meaning and opportunity to reveal the hidden things. Furthermore, in an intellectual base, he/she can construct his speculative thought for comprehending what the question of 'what if' represent, reconstruct it in a socio-cultural context, represent his/her critical thought as a form of knowledge and meaning, develop his discourse or statement with the intention of altering the reality or presents his/her conceptuality that refers a particular understanding.

So, by means of producing the visual expressions on and on, he/she seeks to advance the design, enrich the thought, and seek the potential by questioning all the values or norms of society, establishing a relationship between the society, city, and future potentials. In this way, he/she can directly illustrate the proposed discourse that words cannot. Like Bruno Taut's visual expressions at the beginning of the 20th century did. With his revolutionary expressionist works remaining on paper, Bruno Taut, a pioneer advocate of the modern movement of expressionism, challenges the norms and conventions in art or architecture by emphasizing aesthetics with new and unusual forms and languages by proposing outstanding examples of that never-built in architecture (See Fig.2.9). In his visionary proposal, Alpine Architecture which is a part of his manifesto, he "reinterpreted the meaning of the glass-crystal symbolism as a metaphor of transformation to signify a changed society" via his creative sequence of drawing and illustrations (Bletter, 1981, p.20). In fact, as his productions illustrate his vision, in speculative architecture, the process of production serves an architect to discuss issues of existing economic, social, or political formations and also their relations with architecture within a certain practical and theoretical knowledge and to express his critical vision engaged with all of them.

The critical vision that is tried to be depicted is actually "critical thought translated into materiality," as Dunne & Raby (2013, p35) believe, and "it is about thinking through design rather than through words and using the language and structure of

design”. So, it can be said that a speculative architect makes a systematic inquiry through materialized expressions based on the internal connection between idea and vision. At the same time, these materialized expressions serve to generate new thoughts. As mentioned before, it is a productive process where the conceptual things become figural and figural things can serve to emerge conceptual ones. In other words, “speculative designers should be able to manage a process that can smoothly pass from the abstractness of future thinking to actionable items” (Url-23). So, in a way, they need to materialize their speculative ideas to try out ideas and ideals and investigate an image of a possible or alternative one. It is because, as Auger claims, “if we are able to explore and describe such future scenarios, why can’t we try to realize them as well?” (Url-24). A speculative architect is aware of that and tries to conceive constantly navigating between the materialization of ideas and the generation of ideas with a research identity.



Figure 2.9 : Bruno Taut’s Alpine Architecture, The Building Area on Monte Generoso (Taut, 1919).

Design can give experts permission to let their imaginations flow freely, give material expression to the insights generated, ground these imaginings in everyday situations, and provide platforms for further collaborative speculation (Dunne & Raby, 2013, p.6).

So, the interactive mechanism of production enables new forms of visual expressions that open up other possibilities for debate, linking the discussion to something



different, and providing creativity to capture the non-existent reality and organize a new vision of a world.

### **2.3.2 Research**

It can be said that, with this kind of process of production, an architect, who is in a position of critical and skeptical researcher, can acquire the opportunity to multiply the experience of observing, searching, thinking, exploring, and creating in many perspectives. It is because, in this way, an architect gets the chance to conduct purposeful design activity that 'becomes a mode of research in its own right', in a systematic and conscious way. In service to knowledge, idea, and design that any interpretive, experiential, social, and architectural factors intervene, an architect critically acts as a conscious originator and manipulator of meanings and actions in this production process. So, taking the idea of producing as research, the multiplicity in actions this process creates engenders a design approach that combines both practical and theoretical knowledge with intellectual and architectural identity.

To understand the actions created through the co-constitution between idea and visual and throughout the interaction between materialization and generation of the design idea, the possibilities in that process need to be highlighted. Because the research space is based on critical thinking motivated by intentions, an architect makes all its productions for this research associated with the attitude or position intended to be adopted and the theory or discourse intended to be developed. In other words, this process serves these associations. For instance, within the cycle between the materialization of an idea and the generation of an idea, an architect can change his/her observational position consciously by trying the different design alternatives or directly can re-construct his theory again and again with certain intellectual creativity in the way of the preferred alternative.

It should be underlined that this kind of approach to design encourages creativity and fosters imagery that makes it possible to see certain productions as something meaningful. This interactive mechanism of production gives an architect a chance to manifold the moments of exploration intellectually and to be involved in the process with a kind of attitude signifying consciousness and a critical mind. In a way, this alternates an architect's way of thinking profoundly by offering an opportunity for the

critical and creative act in the way of searching for an alternative or transforming the existing situations.

Creativity is any act, idea, or product that changes an existing domain, or that transforms an existing domain into a new one. And the definition of a creative person is: someone whose thoughts or actions change a domain, or establish a new domain (Csikszentmihalyi, 1996, p.28).

From this point of view, a responsible architect as a creative person intends to assert his/her critical thoughts or actions by producing to construct or re-constructing the things addressed, with his/her systematic inquiry based on the internal connection between idea and vision, and the cycle between the materialization of idea and generation of an idea.

With the help of mental ideas and visual expressions, and by fluctuating between them, he/she seeks to question and discuss the reason, the purpose, and the meaning related to the things addressed and to design through them. In other words, in and through the process of production, he/she intends to 'search for architecture's limits, as indispensable for any future' in reconstructing the physical and social environment. So, it can be said that there is a continuous intermediate stage, where the design process is always supported through production, re-production, and post-production, making it possible to critically think, create, re-address and represent the knowledge, idea, and design itself. All these intermediate states in which the design process is supported provide an endless re-consideration of knowledge, ideas, and the design itself with many possibilities. So, this kind of productive process is opposed to the idea that the design process needs to be finalized with an end object finding a solution to the specific problem. It affirms that this process can be an endless critical and creative act to explore all sorts of possibilities. In a way, it reactivates dormant disciplinary attitudes, including performing speculative activity.

CSD is positioned as a practice-based-research; a mode of inquiry designed to discover and imagine new insights and opportunities; which 'implies a reflection of the contingencies of our world today, and of the practices for creating, imagining, and materializing new worlds' (Ward, 2021, pp.189-190).

Since "speculative design is often driven more by issues or curiosity than by needs," a speculative architect is on an 'abstract journey' where he/she searches with doubt in the way of new opinions, ideals, and views (Lukens & Lukens, 2009). In a sense, these diverse and open-ended productions that manifold the moments of exploration serve

further speculating with an imaginative mindset and offer productive ways of advancing speculative design as creative practice and research methods (Galloway & Caudwell, 2013). Thus, speculative architecture stimulates critical and creative inquiry in and through the process of production by providing increased flexibility to search for deeper understandings to navigate complexity.

Substantially, it can be said that the creative inquiry contains many different visualization strategies within itself since “methodological flexibility and openness, as one of the main characteristics of the speculative practice,” comes forward for the design process (Golub, 2016, p.36). So, it fundamentally does not belong to a particular set of rules or methods. It can apply whatever strategy applicable to observe and explore, spark a provocative and critical discussion, and imagine the alternative social and physical environment. It strives to encourage different techniques, ideologies, and technologies depending on the preferred ways of establishing critical thought and vision instead of adhering to specific methods of the discipline of architecture. Malpass, while disagreeing with the necessity of fully defining the method of speculative practice, claims that “there is so much crossover and bleed between the approaches (Url-25). An open set of methods is important, and actually a critical practice should always be in flux and challenge disciplinary hegemony”.

The pioneers of radical movement can be an example as ones challenging the disciplinary hegemony for their period, with their intentions to produce visually striking representations of a new society and fictional urban scenes of the future by considering the actual facts. They integrate the visual domain into the architectural and urban aesthetic repertoire as their primary medium to produce speculative scenarios. The use of various techniques, ideologies, and technologies to reflect the possible social, technical, and cultural opportunities of the future lives of people can be seen in the visual works of Superstudio’s “Continuous Monument”, Archizoom’s “No Stop City” and Archigram’s “Instant City” (See Fig.2.10). Speculative architecture encourages this kind of challenge in visualization strategies by incorporating into the potential of any accessible mediums and methods of today.

It is likely that there are no methods for speculative designs in general – but methods for particular context and requirements of a particular design. Defining the methods is a crucial part of designers’ ability to critically engage with the people and the context where the design happens (Encinas, Božanić & Šuran, 2021).

In effect, speculative architecture, with its accompanying methods, is far from being closed practice by encouraging the synthesis of a variety of strategies as well as being open to other disciplines and practices. Taking advantage of the theoretical and practical knowledge of other practices, fields, and disciplines increases design possibilities. In a sense, “since speculative design continuously interacts with other related practices, fields, and disciplines, it uses any methodology that is accessible and appropriate at any given moment,” which provides to multiply moment of actions in design and enhances the ways of exploration (Mitrovic, 2015, p.17). Correlatively, by expanding the purview of architectural design towards somewhere more interdisciplinary, multi-layered, and experimental, it fosters the intellectual creativity of an architect that makes it possible to challenge the existing structure and leads to a deeper understanding and diversified design possibilities. “Speculative and related designs can potentially address the possibilities within them, and, as a form of design, do so through methods, approaches and tools that are shared with other disciplines” (Encinas, Božanić & Šuran, 2021, p.164).



Figure 2.10 : Archigram’s Instant City (Url-26).

To find inspiration for speculating through design we need to look beyond design to the methodological playgrounds of cinema, literature, science, ethics, politics, and art; to explore, hybridize, borrow, and embrace the many tools available for crafting not only things but also ideas— fictional worlds, cautionary tales, what-if scenarios, thought experiments, counterfactuals, reductio ad absurdum experiments, prefigurative futures, and so on (Dunne & Raby, 2013, p.3).

In parallel with this multi-dimensional methodology, speculative architecture encourages interaction with any accessible medium to broaden the design’s scope and

adopt the current technologies, techniques, and ideologies in today's heterogeneous environment. Liam Young claims that "speculative architectural practice is really just an attempt to stay relevant in the context of a city that is always changing" (Url-3). Therefore, a speculative architect needs to keep pace with the world of continuous and rapid evolution by keeping their methods, approaches, and tools up-to-date and even innovative to be able to ideate and conceive the vision of society and the world in the way of bringing alternative values, forms, and representations out.

While discussing the speculations from history, Smyth, Auger, & Helgason (2021, p.27) indicate that "alternative or new configurations of the world have been presented across a variety of contexts, using diverse media and for a multitude of different reasons." From this point of view, speculative architecture demands the use of contemporary technologies, techniques, and ideologies to create new alternative contexts for a multitude of different reasons. This is also important in terms of communication. A speculative architect must be understood by others, not just ones from the discipline, in order to cause change and transformation and to be able to "act as a provocation to enable a discussion or debate about the topics, technologies and futures that should be addressed through public interrogation" (Ward, 2021, p.181). For this reason, he/she needs to interact with any accessible medium to search and express himself/herself.

### **2.3.3 Speculative scenario**

Together with this, the design understanding of promoting an interdisciplinary, multi-layered, diverse, and experimental research medium is essential for the designs to emerge through speculation or fiction. It is because, as the thesis claims, without such a research medium, an architect can't be able to search and produce critical and provocative ideas of an alternative world "built' in a factual and fictional blur: the fictional being the proposed, and the factual being the elements we are familiar with so that we can engage or not be completely alienated" (Url-27). Design speculation requires a bridge to connect factual and fictional landscapes as Auger states that

inspiration and influence for this 'perceptual bridge' can come from diverse fields such as observational comedy, psychology, ecology, horror films and illusion for the insights they offer into the complex working of the human mind and how it can be carefully manipulated to elicit reaction (Auger, 2013, p.12).

In brief, a speculative architect needs to include a variety of strategies as well as the knowledge of other disciplines and practices by considering any technologies, techniques, and ideologies that are requirements for a particular context and of a particular design. Thus, with that approach, he/she could structure factual and fictional aspects of the design while discussing through design. In other words, as Dunne & Raby state:

It is the gap between reality as we know it and the different idea of reality referred to in the critical design proposal that creates the space for discussion. It depends on dialectical opposition between fiction and reality to have an effect (Dunne & Raby, 2013, p.35).

At this point, it is necessary to emphasize the importance of the fictional nature of speculative architecture to be able to create an alternative context to design. In Young's words, speculative architecture "operates in the spaces between design, fiction, and futures" (Url-3). The primary role of fiction in the design process is to activate imagination for unpacking future possibilities, try out ideas and ideals, explore hidden realities, and pursue the question of what-if. "Fiction is both real and not-real in the same way. It is about real social worlds, but it's also imagined" (Oatley, 2011, p.37). So, a speculative architect propounds fictional propositions to outline the unreal, unknown, or yet-to-exist alternative world in the way of exploring future implications of emerging urban developments, also by taking into consideration the relationship between architecture and the social entity.

These fictional propositions do not seek to present the whole structured world with all the details. They manifest themselves as fragments with a sufficient level of detail, from simple expressions to a high level of detail, which depends on an architect's decisions, as speculative architecture expects. In other words, they are realized in a fragmentary way, both visually and discursively, for expressing the unthinkable, exhibiting the critical vision in many ways, giving hints at created context in stretched reality, or emphasizing some aspects of the problem. These produced fragments can be considered as parts of 'the imaginary archaeology.' They are saturated with differences that can be organized, restructured, connected, and altered as intended to re-evaluate all sorts of things addressed. They are ready to stand complete and to be decomposed without the idea of producing preordained meanings of the indivisible whole but juxtaposing them in diversified ways to create unconceived meanings. The re-composition of fragments on one level enables one to comprehend, re-examine and

re-assess future contingencies in a critical and creative way, and to speculate constantly throughout the design process to uncover hidden alternatives by constructing new sets of relations in between factual and fictional blur.

The line that separates the actual and the possible is a thin one, and speculative designs thrive in the ambiguous, the artificial, the contradictory and the disputed. Designers creating speculative designs constantly negotiate multiple contexts that lack clear facts and objective truths and do so through a thoughtful and creative engagement with a multiplicity of design methods, tools and approaches (Encinas, Božanić & Šuran, 2021, pp. 164-165)

Together with that, all the productions are in the form of an embedded narrative that serves as a glue to connect the known and unfamiliar characteristics of the design. As Malpass (2013, p.347) believes that “in satiric critical practice, a quality of the narrative is always essential: fundamentally, it describes the use of storytelling techniques to pass comment or inquire through the actions of designing” and also “[...] to understand and engage with the design and further its satiric forms”. It can be said that the mechanism of this kind of speculative narrative works with “the techniques borrowed from film, literature, ecology, comedy, and psychology,” and “they are used to present alternatives in such a way that alternative positions or view of the world can be articulated and understood in material terms” (Auger, 2013, p.11; Malpass, 2013, p.346). The radical architects, the Archigram group’s multimedia narrativity, can be an example since they produce ideas by constructing a narration composed of abundant imagery about the future aspect of living. For instance, in their Instant City, which presents the story of a city in the future, the panorama of collaged fragments with text and pop images includes the simultaneity of various events and differentiated spaces. The familiar and unfamiliar objects are together. The narrative content of their image, which offers the endless possibility of a multitude of readings by creating dynamic relations of fragments, can be seen. In this perspective, similarly in speculative architecture, weaving the narrative helps to bring together the produced visual and discursive fragments in a critical and creative manner as a part of the inquiry.

The creative act is only an incomplete and abstract moment in the production of a work. Within this, the design fragments are reversed, rejected, dismantled, combined with new fragments and reconstructed over and over again. Despite the varied nature of fragments, the connections are usually seamless, forming an open- sourced system of interactions. In this sense, the architectural design process can be understood as a rhizomatic structure, with its non-hierarchical nature of relations where any node (fragment) can be connected to any other (Öztoprak & Caglar, 2020, p.130).

In effect, the design ideas and their visual expressions usually “take the form of scenarios, often starting with a what-if question, and are intended to open up spaces of debate and discussion; therefore, they are by necessity provocative, intentionally simplified, and fictional” (Dunne & Raby, 2013, p.3). Speculative architecture expects the ability to depict speculative scenarios clearly and intelligibly where the existing situations are critically rethought, and the alternatives are explored. Speculative scenarios as a means of visualizing a critical vision are essential to structure the perception of a particular future or an alternative present, but they are not exhibiting how things should be. It is because they do not seek to introduce “a destination or something to be strived for but a medium to aid imaginative thought—to speculate with” (Dunne & Raby, 2013, p.3). So, a speculative architect who “casts as a provocateur and storyteller” intends to build a provocative, simplified, and fictional scenario around their matter to be served for critical and creative inquiry (Young, 2014).

In conclusion, speculative architecture’s productions with diverse and open-ended strategies in terms of methods, tools, and techniques, and so its process as a creative and critical inquiry have the characteristics of fuels for a speculative architect to think, question, discuss and materialize. Thanks to the multidisciplinary, experimental, and multi-layered characteristics of speculative architecture, a speculative architect finds an opportunity to multiply the experience of observing, searching, thinking, exploring, and creating in many perspectives and asserting his/her critical thoughts or actions by his/her productions and process that becomes part of his/her observations, explorations, and speculations. In the end, by nourishing an architect’s intellectual and architectural creativity capability, it proposes a visionary design approach that expands the boundaries of design and also reactivates dormant disciplinary attitudes.



### **3. ARCHITECTURAL LEARNING ENVIRONMENT: STUDIO EXPERIENCES**

#### **3.1 Architectural Learning Environment**

Since “education institutions are the most effective environment to rebel against the routines, status quo and the limits of the discipline,” the architectural learning environment has a significant responsibility to act in a critical rather than conforming manner in both design and research (Çağlar & Curulli, 2020, p. xv). Especially in a technologically, ecologically, and culturally evolving world with significant changes, the architectural learning environment has a role in responding to these changing conditions and takes a critical position. In other words, by acknowledging the “need for innovation in architectural education to adapt to the challenges posed by the new ecological, economic and societal context,” it can be said that the architectural learning environment requires to be flexible to absorb ever-changing needs (Çağlar & Curulli, 2020, p. xiii). Furthermore, it needs to foster an open-minded interactive environment, provide a powerful thinking ground in particular, and apply inquiry as a standard design practice to adapt to growing and glorious complexity.

As the architectural design studios are the backbones of the architectural learning environment, they are where the architectural design practice can be actively engaged with the roles and responsibilities of the disciplines. “The architectural design studio offered the ideal setting for integrating knowledge—a place where synthesis and application, reflection and action, occurred simultaneously, joining theory and praxis” (Boyer, Mitgang 1996 as quoted by Crosbie). So, considering the ideal setting of the architectural design studios, they are the interdisciplinary, multi-layered, and experimental research medium actively engaged in theory and practice together to maintain a critical position. They are the locus that has diverse potential to “create an architectural practice embodying a broadly informed, culturally rich, linguistically conversant, technologically advanced, socially responsible and formally creative art” (Solovyova, Nanda, and Downing, 2009, p.346).

To act with this kind of understanding, it is inevitable that design studio approaches must diversify for the sake of expanding the boundaries and capabilities of the discipline, especially in today's heterogeneous environment. It is because, as Caglar & 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).

The architectural design studios have the ability, and all the tools to develop this kind of understanding and to incorporate many different innovative and dynamic approaches that have emerged in an atmosphere where design practices have diversified with many technological and ideological developments, the way of seeing and the way we practice architecture have transformed, and even the vocabulary of their discussions has changed.

For this very reason, the design approaches that are future-oriented and critically positioned, that include intellectual outputs as well as actual ones, that offer unlimited freedoms and possibilities for interaction with other fields and disciplines, that address global issues, and that deal with the production of new knowledge and innovative ideas become prominent in architectural design studios to cover the diversity mentioned. The thesis claims that speculative architecture is one of these design approaches that can get off the ground in this kind of architectural design studio and can strengthen such a research medium. In particular, considering that the professional side of the discipline could not include these valuable emphases, the architectural diploma studios provide that interdisciplinary, multi-layered, and experimental environment where speculative and critical thinking practice can structure the essential design principles. In other words, the architectural learning environment is the most suitable place where a design approach that emphasizes a critical attitude of an architectural designer, discursive richness of design, and flexibility in production through the design process can be adopted.

As a pedagogical tool, speculative design – at its best – opens students' minds to brave new worlds: to critical and creative interventions, transgression and change, as well as the possibility of applying design principles and tools in very different contexts and types of projects (Auger, Hanna & Mitrović, 2021, p.209).

From this point of view, speculative architecture can be considered a design practice that pushes forward a critical and creative design process in the educational context. “As it allows students the safe space to explore ideas and understand, or think (make) through, the possible impacts of their ideas,” it can engage with the essential responsibilities and the roles of the architectural design studio (Url-28). Considering its mode of inquiry, flexibility to absorb ever-changing needs, and acting in a creative manner instead of a conforming manner, speculative architecture presents great potential to stimulate the learning environment and has the capability to multiply the purview of architectural design. In Deepa Butoliya’s words “as design educators, we cannot afford to exclude Speculative Design from a holistic education of our students, especially after the current crisis that the whole world is experiencing” (Url-29).

At this point, the thesis focuses on the Diploma Studio, MİM 402 Architectural Design Studio VIII, at TOBB ETU, Department of Architecture, as an architectural design studio that adopts speculative architecture thinking and is a research medium. Since the intention is to expose the potentials and effects of speculative architecture in an educational context and understand what it offers to the architectural learning environment, it is important to share the knowledge of the architectural design experiment of the design studio that “aims to welcome, enable, and enhance multiplicity and plurality by constantly readjusting itself” (Öztoprak & Çağlar, 2020, p.136). So, there is a need to take a closer look at the Diploma Studio’s approach to architectural design, how it evaluates the architectural learning environment, and how it positions the architectural designer in the design process.

Evaluating the architectural design studio as “an environment for thinking, creating and producing architectural design, not an environment for transmitting architectural knowledge,” the Diploma Studio is a research space with the intention of suggesting a non-linear and often unpredictable as well as explorative design process (Öztoprak & Çağlar, 2020, p.137). By involving the understanding that architectural design can be able to produce various alternatives both for the world of today and the future by means of productions including both actual and intellectual ones, it is based on the dynamic and adaptable structure that can make possible to progress under multiple changing factors, and seeks methods suitable for the digital age and language. (Çağlar, Öztoprak, & Sipahioğlu, 2021). Defining architectural design as a process of discussion on global problems on a speculative plane, it aims to contribute to urban negotiation strategies

and to search for alternative values and experiences. Therefore, it is critical, speculative, and inherently contains a current debate.

Furthermore, the Diploma Studio offers a unique process for each architectural student by allowing them to decide on the design problem and how it will be handled, as well as on architectural approach, program, scale, and design/production method. It gives an emancipatory research medium where the architectural students are seen as active researchers whose own ideas and interpretations rise to consciousness, as an observer in a state of mind who reflect upon the current situation by questioning, and as a socially responsible intellectual actors whose act in the new landscape of possibilities with diverse productions. “While observing and experiencing the city, the architecture student works simultaneously for the city, opens new discussions, and produces ideas and projects about the city in architecture design studios” (Bancı & Caglar, 2021, p.8). So, it can be said that the Diploma studio leads them to act creative and critical manner in the design process. At this point, it is possible to perceive the three major inferences ensuing from the understanding and structure of the diploma studio, in which the theoretical framework of the thesis, which intends to describe the main principles and characteristics of speculative architecture, is also based upon. These three significant inferences basically prioritize the architectural designer, the design idea, and the way the design is produced. However, to obtain an in-depth evaluation of what speculative architecture embodies and is engaged with and to reveal its potential and effects with the outputs of Diploma Studio, the author prepared an infographic to outline the theoretical framework. (See Fig.3.1).

As the infographic indicates, the theoretical framework highlights the essential topics related to speculative architecture. In other words, by introducing the key concepts that can conveniently be said to characterize speculative architecture, the theoretical framework emphasizes how multidisciplinary, experimental, and multi-layered speculative architecture is. From this point forth, a tool has been developed by the author based on the theoretical framework and with the help of the infographic in order to better understand the reflection of these characteristics, especially in the architectural learning environment, and to be able to evaluate case studies. This tool serves to structure the main principles and characteristics of speculative architecture in the aggregate as the theoretical framework puts forwards and works as a ground that makes it possible to understand and evaluate speculative projects. At this point,

understanding this tool's working principle is important for the thesis and the case study.

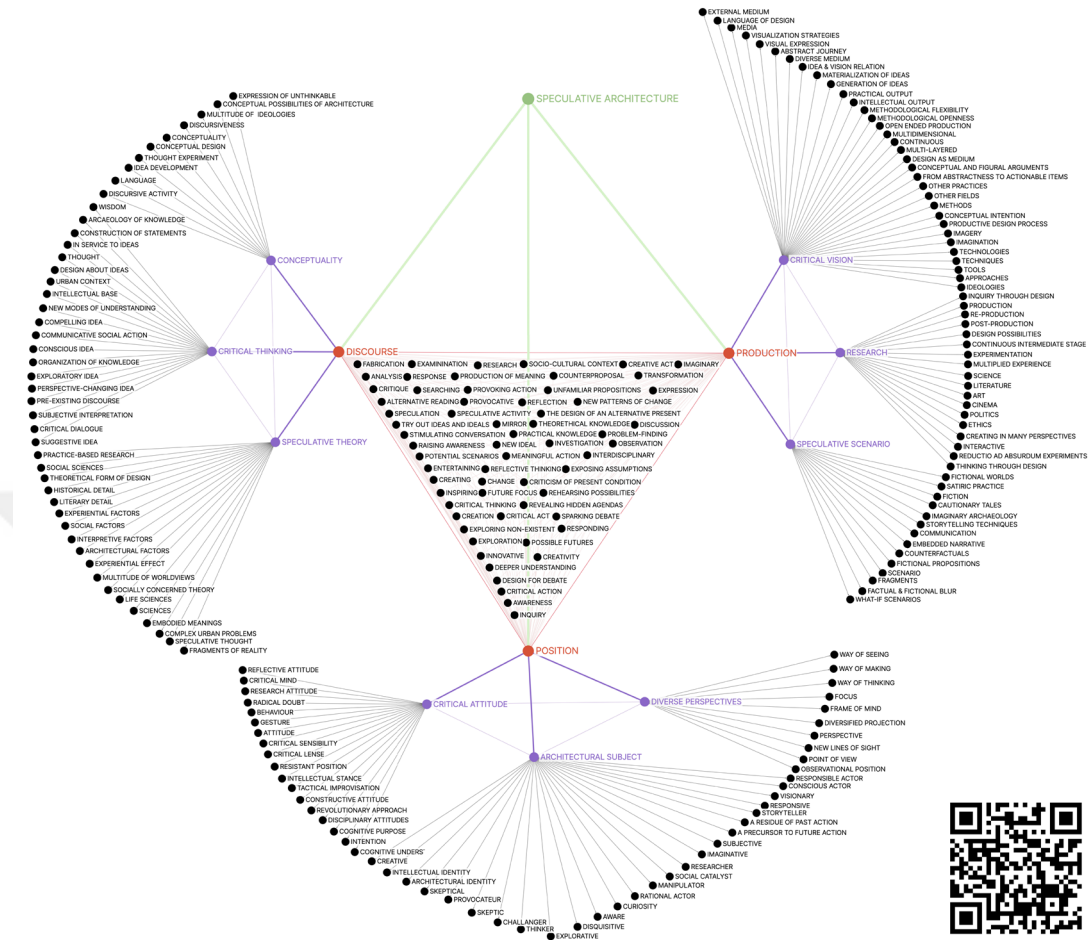


Figure 3.1 : The Outline of Speculative Architecture<sup>12</sup> prepared by author in GRAPHCOMMON environment (Url-30).

### 3.2 A Tool for Speculative Architecture

It is obvious that speculative architecture can be examined from many perspectives due to its multidisciplinary, experimental, and multi-layered characteristics, as mentioned before, and the flexibility and manifoldness of its conceptual outline. For this very reason, there is a need for 'a tool', as the author prefers to call that, which works as an enriched structure to provide a ground for prominent principles and as a demonstration of an explorative design process. In this way, a tool can encapsulate the approach's multidimensionality, focus, and design process in an integrated way and

<sup>12</sup> For larger image, see Appendix 2.

allow one to comprehend the potentials and effects of speculative architecture in an educational context by leading the way for the case study. In other words, it allow to think the conceptuality produced by the thesis together with the outputs produced by the case studies. It should be underlined that it does not try to compare the cases, but intends to reveal their own unique value to understand the effectiveness that speculative architecture provide by embracing different pespectives and abilities. In a way, it can make it possible to mediate between speculative architecture and its reflection in the architectural learning environment without the intention of comparison or pattern.

It is essential to say that, in the first place, the tool has been developed specifically for this thesis. It can be further developed, changed, and enriched in a diverse way since speculative architecture is an approach whose definitions are not precisely specified and continues evolving. Besides, the theoretical framework is open to interpretation, and the resulting tool was created from the author's observational point of view.

Since the tool aims to be a mediator to reveal the potentials and effects of speculative architecture and the fact that it offers different ways, possibilities, or opportunities in the context of architectural education, it was important to understand and then embed the prominent principles and concepts in the tool. At this point, the prepared tool addresses speculative architecture under three major aspects as the three integrated parts of a visual graphic, namely intellectual ground, multidimensionality, and inquiry through design. This means that the information obtained from the theoretical framework has been refined as a way to constitute three main aspects. In other words, these three main aspects form an inclusive structure that can outline the theoretical framework and act as the backbone of speculative architecture. According to this, the tool primarily considers an architect's intellectual creativity with the acknowledgment that speculative architect acts on an intellectual ground and in the focus of speculation, critique, and knowledge. Beyond that, it intends to put forward the multidimensionality pointing out the various elements of the design.

Furthermore, it addresses the design process with the awareness that a speculative architect makes a systematic inquiry through design. Thus, the tool aims to be able to discuss a speculative project in an inclusive way in the light of these three main backbones, which emerged thanks to the theoretical framework that outline the founding principles of speculative architecture (See Fig. 3.2). It is important for the

thesis to take a closer look and grasp these three main parts. To reiterate, the author has interpreted these three refined parts as a summary of the theoretical framework from her point of view, so it is open to further expansions and changes.

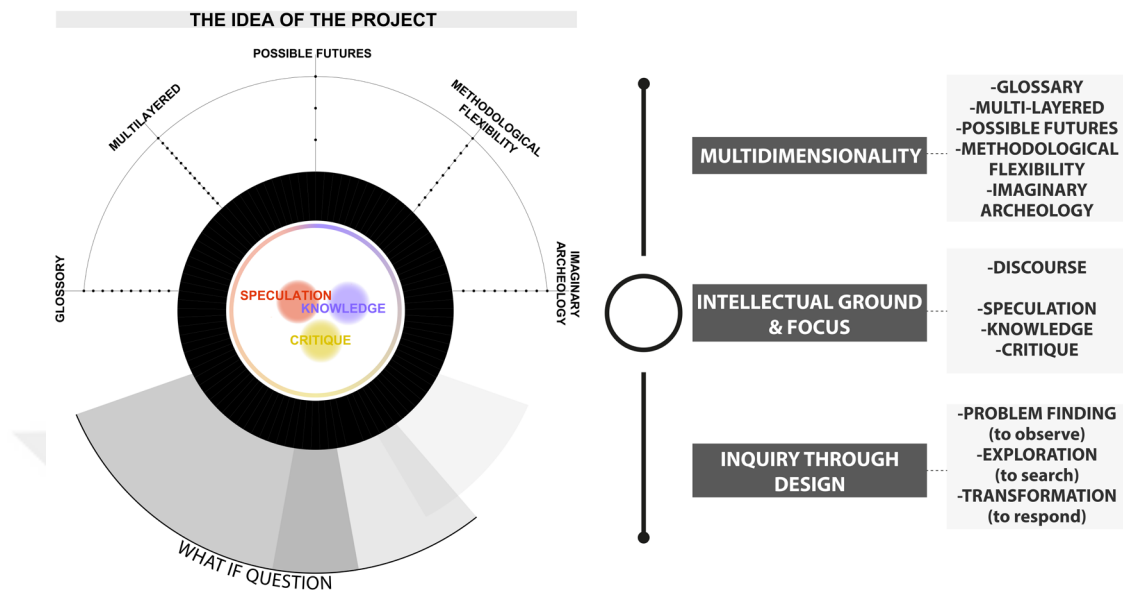


Figure 3.2 : The template and the diagram of the tool prepared by author.

*The First Part: The core conceptual ground*

The core of the tool considers the fact that taking a critical and conscious position as a speculative architect is the essential attitude for the social development of the future world and that having a responsibility to speculate with both practical and theoretical knowledge to able to observe, search, and respond to the existing paradigm is the main concern. For that reason, the tool focuses on the core concepts, ‘critique,’ ‘speculation,’ and ‘knowledge’ in the center to discuss the behavior of a speculative architect who is intended to create his/her relative place, situation, or standing with a certain reason and purpose. In other saying, as developing new lines of sight by speculating, behaving with ongoing reflexivity with specific knowledge, and discussing ‘what if’ questions in a critical base is inevitable for speculative architecture thinking, the core aims to emphasize that. Because where the ‘critique,’ ‘speculation,’ and ‘knowledge’ is the main focus, a speculative architect can have the possibility to re-question, re-evaluate, and re-produce continuously through creating an alternative reading. And what is more, he/she can become ‘a precursor intellectual to future action that indicates the reflective attitude, the signifying consciousness, and critical mind’.

At this point, the tool attaches particular importance to the intellectual base, acknowledging that a speculative architect “needs to establish an intellectual stance of its own” to develop an understanding of the world and society (Dunne & Raby, 2001, p.59). It means since producing conscious, critical, and speculative ideas require to be an intellectual to create crucial changes, the tool intends to reflect the understanding of speculative architecture, which can be considered as a ‘thought catalyst’, and to demonstrate that a speculative architect acts in a discursive context founded in critical thinking. According to these, there is a need for a continuously developed conceptual background to think with, speculate with, design with, and reconsider one’s initial presumptions. The tool aims to contain this ecosystem of ideas and ideals. In other words, since developing a vocabulary in which to verbalize their design intentions and rationale is an important issue in speculative architecture, the tool exposes the diversity and specificity of their ideas. As a result, the intellectual ground enriches as certain knowledge and concepts from different disciplines and practices are integrated into the design, critical expressions are developed and allow for new perspectives, as speculative thoughts and ideas are produced. So, the tool tries to demonstrate this intellectual ground with all the key concepts of a speculative project with the intention of both pointing out how a speculative architect performs a critical and creative act and reflecting the richness of design.

The intellectual base works with the core concepts, ‘critique,’ ‘speculation,’ and ‘knowledge’ in the center because the discourse that a speculative architect produces needs to be based on them. In this way, the conceptual realm of his/her design engages with the critical, speculative, and conscious positions taken. This connection is important to discuss the design as a research based on ‘intellectual inquiry to adhere to a path that critical thinking forms.’ The tool structures the core part within this perspective.

### *The Second Part: Multidimensionality*

The upper part of the tool basically intends to demonstrate the multidimensionality of speculative architecture, indicating an understanding incorporating a multitude of design points. Acknowledging that speculative architecture encourages multiplying moments of action in the design and enhances the ways of exploration, it aims to represent the characteristic of being flexible to anticipate and accommodate new ideas, openness and disposed to enrich the design with numerous aspects. Since a speculative



architect is a responsible actor originating the meaning and actions critically and constructing the setting and statements, he/she needs that state of mind holding the multidimensionality required. At this point, the tool addresses a speculative project over five different refined points integrated with design with the intention of finding out a curve of the multidimensionality with a kind of evaluation. These five points have been formed by the author, adhering to the theoretical framework as follows:

**Building a glossary:** Since developing one's own vocabulary and the conceptual ground is an indicator of one's richness of discussion and emphasis of one's productive process of thought experiment, the first point evaluates the multiplicity of the content of the glossary a speculative architect created. Based on the intellectual ground that is the core part of the tool, it treats each concept as the content of the constructed glossary and puts the first point of the curve to be formed according to the thickness of the glossary. It is because it can be said that a distinctive glossary can show the multidimensionality of a speculative architect's project whose intention is to develop his/her architectural design over his/her socially constructed theory that constitutes a new vision for the world and on produced knowledge embodied meaning sought.

**Being multi-layered:** The capability of speculative architecture to be multi-layered, in other saying, its opportunity to interact with other related practices, fields, and disciplines together with the architecture itself, constitutes another point of multidimensionality of a speculative project. Since being multi-layered provides different perspectives and projections in the creative and critical design process and opens new research areas to think beyond the limits of architecture, the second point intends to address different contexts, or layers, that provide value. At this point, by considering physiological, economic, architectural, educational, historical, cultural, philosophical, aesthetic, ethical, ecological, political, technical, technological, and social dimensions of design as a substantive layer, the second point of the curve is identified depending on to what degree the speculative project is layered. In this way, it could also be possible to understand how a speculative project incorporates a multitude of worldviews, ideologies, and possibilities with knowledge outside the field of architecture.

**Future focus:** As the act of speculation as an activity to produce alternative scenarios where the future is questioned for the new or alternative reality requires to position in the spectrum of alternative types of futures together with the present, the third point intends to demonstrate in which possible future a speculative architect takes his/her action. In other words, by putting forward a ‘what if’ question, a speculative project can be set in a possible future that includes plausible, probable, and preferable futures or an alternative present. According to this positioning, alternative reading and research for the new or alternative patterns of change carry out. So, the third point of the curve defines the scenario of a speculative project from scientifically possible ones to an extreme one and informs about its what-if question. If a speculative architect’s debate is on the preferable future, which concerns ‘what we want to happen,’ the curve rises because he/she opens up a wider field for speculation by designing without adhering to current knowledge, facts about how the world currently is, or without worrying about cognitive information.

**Methodological flexibility:** Engaging with any accessible methods of today’s speculative architecture is a methodological playground to encourage a wide variety of productions, providing multidimensionality to design as well. A speculative architect can observe, search and explore in different manners depending on methodological flexibility that plays a fundamental role throughout the critical and creative design process. According to this, the fourth point intends to evaluate the plurality of the strategies that regulate specific relations with all design constituents for exploring the different alternatives in a systematic way in the whole design process. At this point, the capability of a speculative architect to produce with the help of various strategies can be determined according to the tools, techniques, instruments, methods, genres, and concepts he/she uses from literature, science, politics, ethics, art, architecture, extra digital techniques, pop-culture forms, prototypes and another medium like books or manifestos.

**Imaginary archaeology:** The last point of the curve is related to the bottom part of the tool, which intends to demonstrate the production process, in short. The last point of the curve is related to the bottom part of the tool, which intends to demonstrate the production process in short. Since speculative architecture

leads an architect to a sort of imaginary archaeology in terms of the production and post-production techniques, how a speculative architect manages the production process which makes it possible to connect verbal and visual ideas, concepts, and designs, and combine them into coherent wholes with responsibility, becomes important. So, this point comprehends which points a speculative architect materializes his/her idea through the inquiry. At this point, the author believes that this imaginary archaeology is carried out in three indispensable processes, which are spontaneous and non-linear, in a speculative architecture; the process of problem finding, the process of exploration, and the process of transformation. It can be said that a speculative architect has the capacity to realize a systematic inquiry fed by the cycle between the materialization of an idea and the generation of ideas within these three processes.

### *The Third Part: Inquiry Through Design*

The third part of the tool intends to understand the production process, which consists of making conceptual intentions explicit, and re-engaging with the materialized ideas as a starting point for new ones with visualization strategies. In a way, it tries to comprehend a speculative architect's inquiry through design and what he/she focuses on while producing. As the author grounds in the theoretical framework, this process is principally based on productions that become part of a speculative architect's 'observation,' 'explorations', and 'speculations,' which refers in order the processes of problem finding, the process of exploration, and the process of transformation. It must be highlighted that the visualization strategies play a fundamental role throughout the design process for an architect who is a creative and critical researcher as his/her productions become part of their observations, explorations, and speculations. From this point of view, this part of the tool aims to illuminate and evaluate the enhanced creative and intellectual design process that a speculative architect doesn't target a final point.

**Problem finding:** Speculative architecture puts emphasis on 'problem finding' more than 'problem-solving' and stimulates an observer state of mind. In parallel with that, a slice of the bottom part illustrates how a speculative architect produces to find problems and takes his/her position by means of developing a perspective towards the world in a critical base, discussing, and

questioning. In this process, he/she can spy, see, or observe what is normally hidden or obvious, understand the existing situation, notice the different points of view, ask relevant questions, and can develop some new meaning together with drawing from personal experience and existent knowledge, and takes his/her critical position with a kind of awareness accordingly. He/she materializes his/her ideas for problem-finding, observing, and understanding. This slice intends to contain the visual expressions of this process.

**Exploration:** Another process of systematic inquiry in speculative architecture is to explore with a kind of research attitude and intellectual identity to 'establish different levels and layers of meanings and sense' in an architectural and social context based on critical thinking motivated by intentions. In other words, since speculative architecture encourage to development of many levels and layers of understanding, and an explorative action, the process of exploration is another substantive part of the inquiry for a critical and skeptical researcher. That is why another slice of the bottom part gives information about all the visual expressions produced, which refers to the continuous search for multiple and maybe divergent ideas and thoughts in the way of crucial changes and alternative reality.

**Transformation:** A speculative architect is a conscious actor responsible for responding or reflecting on what exists in a critical and creative way in line with the specific problem that he/she observes and the valuable exploration acquired in her/his research. Accordingly, as the reflective moment of his/her action becomes important, he/she initiates the transformation process for the design by speculating about driving change. This process actually constitutes the reaction moment of the systematic inquiry after questioning, explaining, researching, and evaluating. So, another slice of the bottom part includes the visual expressions of the process of transformation in systematic inquiry.

It must be noted that these processes can be intertwined, co-occur, become more focus points than the other, is non-linear, and often unexpected; herewith, they support unpredictable outcomes and unending productions. A speculative architect is flexible throughout this kind of production process and therefore has the opportunity to experience many distinctive perspectives and projections, different contexts and layers, and strategies and methods. Also, he/she can pursue the what if question at any

point in the production process. So, that is why the third part of the tool also intends to represent this flexible attitude of a speculative architect.

Consequently, the aim is to have a chance to address and evaluate a speculative project through this tool, which works as an inclusive structure that reveals a reflection of the ground on which the design is established, of the multidimensionality of the design, and the production process. In a way, this tool is an expressive or illustrative visual graphic based on the theoretical framework built for reconsidering speculative architecture's founding principles, together with its characteristics, explanations, and methods which are still expanding, changing, and open to further expansions. So, it allows us to understand a speculative project with multidisciplinary, experimental, and multi-layered characteristics. Together with it, the aim is also to have an opportunity to discuss the potential and effects of speculative architecture in an educational context. So, this tool leads the way for the case study. Of course, speculative architecture has many aspects, especially in the educational context. For this reason, this discussion and the tool have been created from the author's observer point of view based on the theoretical framework and the studio experience. So, it needs to say that again, both the discussion and the tool can be further developed, can be changed, and can be enriched in a diverse way.

From this point, the tool serves for discussing the outcomes of the Diploma Studio, MİM 402 Architectural Design Studio VIII, at TOBB ETU, Department of Architecture as the case studies, since the intent is to comprehend the potentials and effects of speculative architecture in the architectural learning environment. Since the ultimate goal is to be able to read that speculative architecture creates manifold potential in this environment, with the help of this tool, it will be possible to observe the interrelation between it and its place in a learning environment where speculative architectural thought is adopted. Besides, the Diploma Studio, which has been conducted with some experiments and experiences that develop in the process, will be understood by employing this. At this point, the author, as a teaching assistant with an observative position in the Diploma Studio, will create a specific visual graphic for each speculative project by transferring each project data to the tool in line with a set of self-consistent measurements and try to understand them, to discuss the potentials, to observe the differences and to present a discussion.

### 3.3 The Case: 2020-2021 Diploma Studio

The thesis focuses on discussing the speculative projects of the 2020-2021 Diploma Studio<sup>12</sup> as an architectural design studio that adopts speculative architecture thinking and a multi-layered experimental research environment as the case studies. The 2020-2021 Diploma Studio, ‘Comprehending the Future of Ankara: Renewed Landscapes,’ focuses on speculative scenarios for the future of the urban landscape of Ankara by thinking and questioning critically about the characteristics of the city, developing an in-depth understanding and designing through that. In a way, by evaluating architectural design as a critical and creative act, the intent is to re-generate meaning in and through the city of Ankara. The text of Diploma Studio titled ‘Comprehending the Future of Ankara: Renewed Landscapes’, where expectations from the studio were shared with the students, will be explanatory at this point:

Nowadays, we need more than ever to question the urban, architectural and spatial factors that make Ankara a city and capital, with a critical awareness and to reveal our values. Are our daily life practises in this city provide the quality we deserve? Can we wander around the streets by walking or cycling? Do we have opportunities such as lounging, reading a book under a tree in the park, sitting on the street and eating something? What are the qualities that make the city worth living in this city, which is covered by buildings, shopping malls and multi-lane roads? What are the disruptions and deformation that erode these qualities? We believe that architects have a responsibility as citizens as much as they are professional, identifying the problems that make Ankara increasingly incomprehensible, bringing them to the fore to try to eliminate them, putting the necessity of making these problems comprehensible at the focus of architectural and urban discussions, constructing pioneering and exemplary design processes, and having something to say about them. In this context, we build a learning environment of the Diploma Studio by focusing on Ankara, where we expect its layers, time, qualities and places to be comprehended and made comprehensible. We know that main mental connotations consist of Parliament, Ministries, other political and managing bodies, squares, parks, working and economic opportunities, business centers, malls/shopping centers, culture, history, public transportation, traffic, illuminated boulevards, avenues and streets, environmental problems, culture, entertainment and education opportunities, skyscrapers, cinema, theatre, politics and administration. History, culture, memories and places exerts an influence on the existence of Ankara which is a living organism like all cities, like the political, economic and technological conditions. But today, we see that Ankara has vital problems. Since becoming the capital city, Ankara has been suffering from the dominance of the chaos dominating the living spaces, caused by mass migrations, unplanned settlements, faulty socio-economic planning, relationship based on self-interest and rent, and the chaos created by aesthetic deprivation. We believe that the way to comprehend Ankara's daily life

and its spaces is to discover, analyse and intervene with a new consciousness, the layers formed by the city's pavements, streets, squares, districts, neighbourhoods and regions and the infinite variety of relationships they establish with each other. With this new consciousness, we want to emphasize the essentiality of every urban structure to be at peace with each other, to be together without displaying the desire to destroy the other or to dominate over the other, and to underline the necessity of adopting the desire to integrate with the city, to identify with it, to see it as a part of ourselves, to feel ourselves as a part of it, to feel free ourselves in there, and to live in a healthy city.

As it can be seen from this text that the diploma offers to the students, the projects were developed with the idea of speculative architecture thinking to reconstruct the meaning of the city of Ankara. The effort was for exploring new urban situations, lifestyles, places, and relationships that may emerge with the changes due to the current crises in the city by addressing research topics such as rural developments/agricultural cities/urban agriculture; local production/consumption; urban transportation networks/clean energy sources; settlements of various scales; open and green spaces/urban voids; continuities and disconnections in the city; publicness/privacy and so on. Speculative architecture thinking has offered a possibility to think critically about transforming the city's existing structure, Ankara, in both physical and social contexts. Although the Diploma Studio has been conducted with some experiments and experiences that develop in the process and by adopting speculative architecture thinking whose definitions, conceptual qualities, characteristics, and methodologies, i.e., the founding principles, are not precise and defined in the context of architecture, the outputs are essential for understanding both speculative architecture and its possibilities in the educational context. So, it should be noted here that the thesis offers to understand both of them through the case studies with the help of the theoretical framework and the tool prepared.

The seventeen speculative projects developed at the 2020-2021 Diploma Studio, in which speculative and critical thinking structures the essential design principle throughout the process take part in the study as the relevant cases and are discussed. All projects primarily were get involve in research process performed in the rhythm of the students' own choice in the first term, where speculation start in the studio. This research part of the studio intended to create an individualised learning environment which is also speculative, without prioritizing the outcomes. Together with that, the Diploma Studio offered a unique design process for each architectural student in the

continuation of this research part of the studio, by virtue of speculative architecture thinking's multidisciplinary, experimental, and multi-layered characteristics and the flexibility and manifoldness of its conceptual outline. So, each of these seventeen projects carries different identities. As has always been underlined, the design area, program, scale, or problem were not specified, so the architecture students were allowed to create their own design context and the topics they wanted critically think about. So, the fact that there are so many cases actually expresses diversity, plurality and polyphony that the approach enable in the educational context. In a way, it brings with it the enlargement of the discussion areas and the revealing of different perspectives.

In fact, acknowledging that the studio is a research space that provides that interdisciplinary, multi-layered, and experimental environment, the expectation of the studio was a critical attitude of an architectural designer, discursive richness of design, and flexibility in production, which are the three essential factors for the speculative level.

Therefore, the focus, the dimensions, and the production process of the projects vary. For this reason, the tool prepared for the thesis produces different visual graphics for each of the seventeen projects. The comprehensive details about these speculative projects can be seen in these visual graphics. The discussion on the potentials and effects of speculative architecture in an educational context will be made through these produced images.

#### *Case 1: UPCYCLER PARK*

The proposal, UPCYCLER PARK, bases its criticism of the urban environment on the amusement park named 'Ankapark,' which was constructed on the Atatürk Forest Farm, which is regarded as part of the city's and the nation's historical heritage but is presently vacant and looks like an iron pile (See Fig. 3.3). The students observe and identify the problem of 'Ankapark' being a pure simulacrum, hyperreal, where simulacrum has no relationship to any reality whatsoever because the park acts disconnected from the city and its inhabitants, with the awareness of the political reasons and waste culture behind. They also position against the lack of sensibility to the urban environment and values. So, the concern is to investigate hidden possibilities, challenge new development patterns, and come up with creative and



thought-provoking ideas to revive a valuable part of the city that has been left to rot. In this direction, the students search for a sustainable urban landscape through a kind of new ecology for the preferable future by critically asking, ‘what if an architectural structure that provides upcycling and production with algae culture was developed for a sustainable urban landscape that does not ‘pretend to be’ nature?’ (See Fig. 3.4).

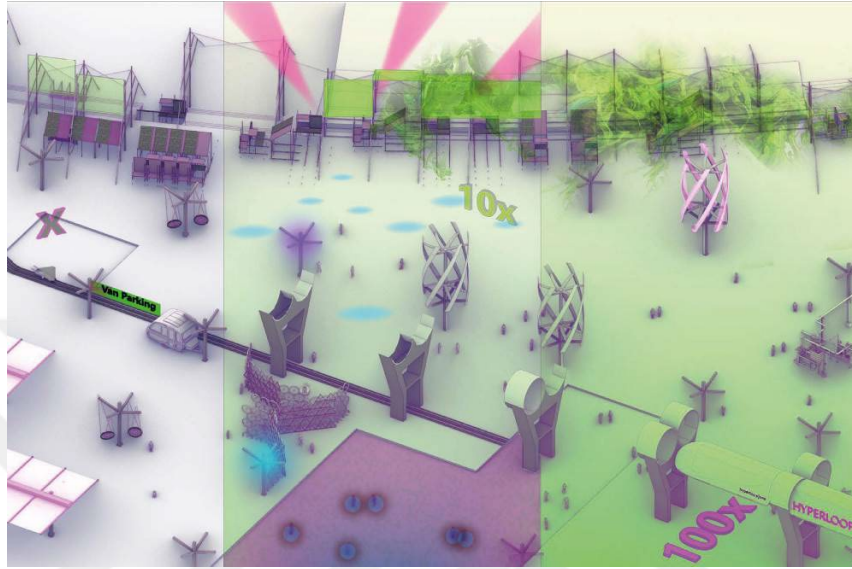


Figure 3.3 : UPCYCLER PARK<sup>13</sup> by Beyza Ayaz, İrem Tümay, Yasemin Engin.

Developing an intellectual stance with radical doubt, the students construct their speculative theory in prior knowledge from the fields of sociology, technology, technic, politic, ecology, ethics, aesthetics, philosophy, culture, history, education, and economics, integrated with architecture, for their alternative context. They produce their own critical thoughts with a kind of cognitive understanding. They propose an architectural structure/steel frame that provides upcycling and production with algae culture and bioreactors by demolishing and re-using the existing amusement park structure, with the intent of reconstructing the definition of nature in the urban environment. In a way, they respond to the world with the speculative scenario that intends to transform the city socially and physically with sustainable urban agriculture and a production network. So, developing a new mode of understanding the urban environment and presenting provoking ideas, the proposal discusses and reflects ‘what we want to happen’ in such a way making the world as desirable as it can be.

---

<sup>13</sup> To see more visual productions, see Appendix 3.



expectation of a sustainable urban environment in Ankara with a kind of reflection of their sensitive and critical attitude.

### *Case 2: POPS ANKARA*

The proposal, POPS ANKARA, voices criticism that the urban fabric and the mechanization of daily life practices do not allow coincidence and interaction in Ankara, which also prevents the productivity and self-improvement of social individuals (See Fig. 3.5). By approaching the city from different standpoints, the students observe the problem of the enclosed spaces and unqualified urban voids that create borders within the city, interrupt urban practices, and are irrelevant to their context. They critically refer to them as non-places. In this context, the proposal addresses the area of The Old Coal-Gas Factory, which was a preserved immovable cultural heritage but then demolished by the authorities and can be evaluated as a non-place. The concern is to search for an urban landscape and voids that acts as an executive of human relations in that area and disengages with the disconnections for the plausible future, with the idea of ‘what could happen if the urban landscape, which establishes inter-city connections and focuses on experience and interaction, was included in everyday urban practices?’ (See Fig. 3.6).

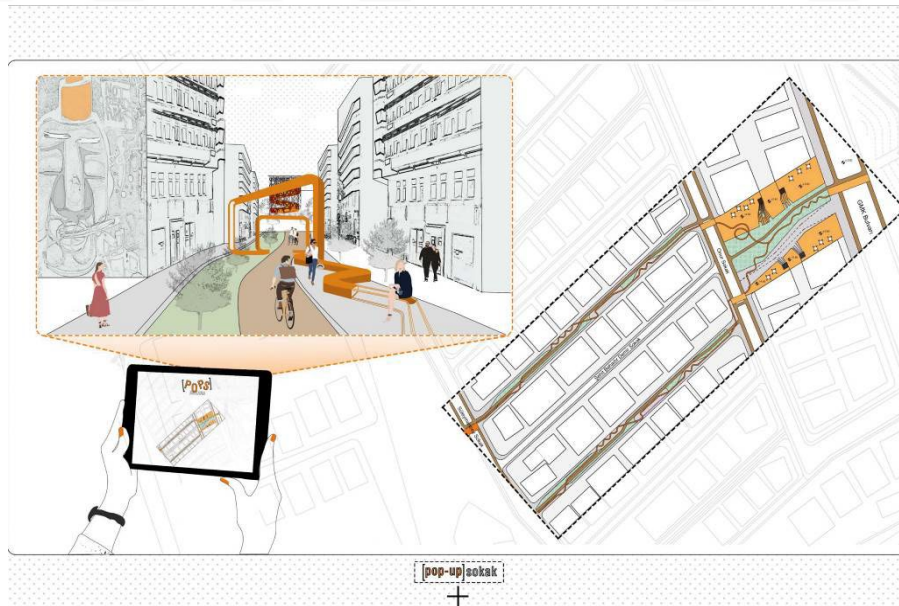


Figure 3.5 : POPS ANKARA<sup>14</sup> by Büşra Bal, Emre Cansever, Ecem Bozbey, Merve Uğurlu.

---

<sup>14</sup> To see more visual productions, see Appendix 4.

For that concern, they debate intellectually and try to articulate new ideas and ideals involving social, cultural, technical, historical architectural, political, and aesthetic notions for the transformation of the existing situation. The speculative theory of the proposal is based on the idea of next-generation flexible architectural structures and spaces integrated with the urban landscape and social media, where productivity and development of individuals are at the forefront of establishing urban connections and infiltrating urban practices.

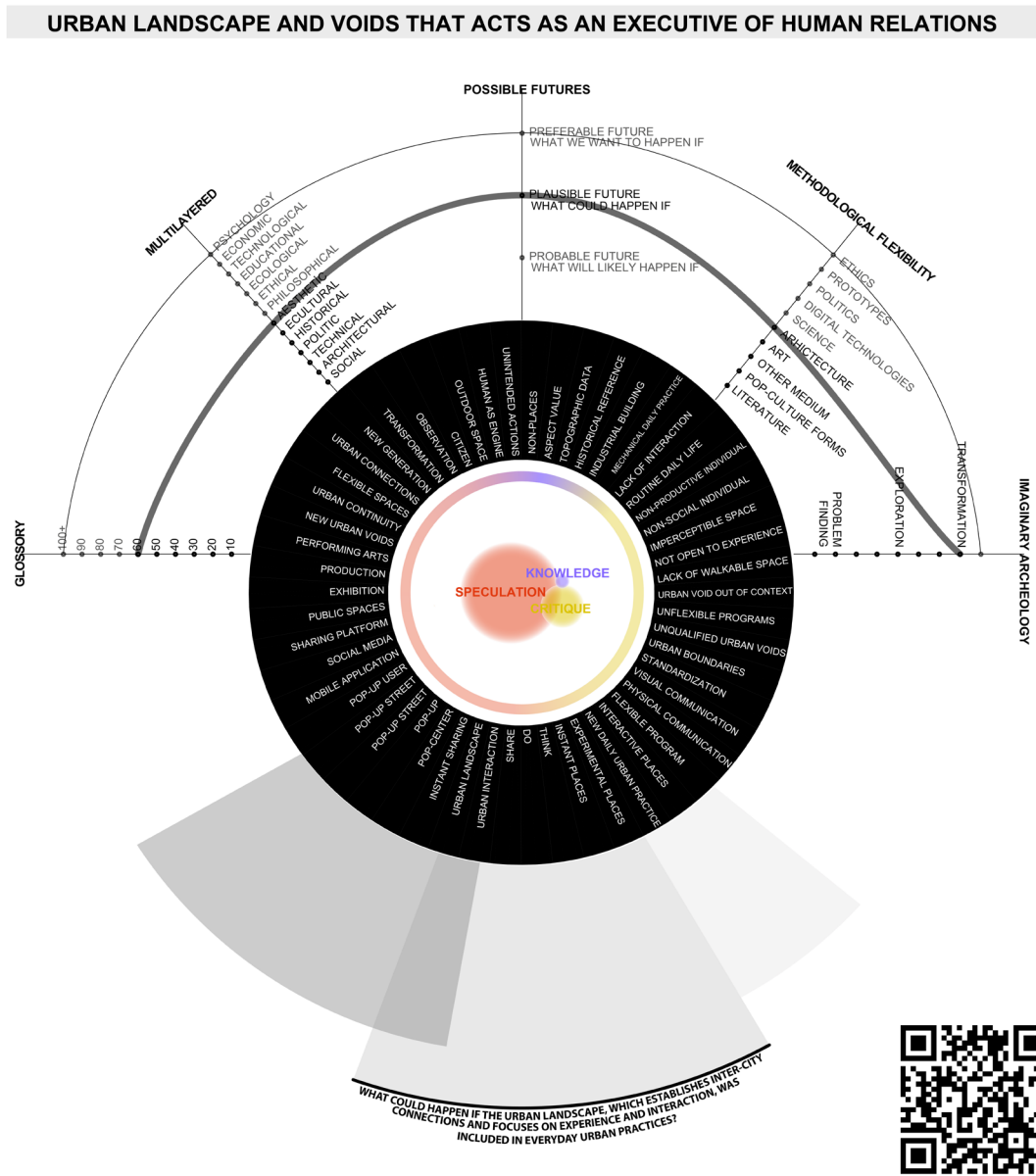


Figure 3.6 : POPS ANKARA’s visual graphic.

In that direction, the students create ‘pops-up’ spaces that show up in unexpected places at unexpected moments and offer coincidental experiences for society by

strengthening the intersection between the city, the citizen as a productive engine, and the action. So, their speculative scenario intends to achieve an integrated and inclusive urban and social environment without the lack of visual and physical communication by building up a new understanding of daily life practices.

The students visually research and express their speculative ideas in a critical and creative way with a synthesis of a variety of strategies. They utilize the technique of comic books to weave the narrative through a character, the technique of graphic design, and collage to criticize the mechanization of daily life practices and make their own 3D pop-up book. Also, they make architectural drawings and digital models throughout their inquiry to explore pop-up spaces with different structural try-outs, prepare some gif animations to highlight the chance of urban experience in unexpected moments or places, and more. So, they translate their critical thought into materiality with an open set of methods.

### *CASE 3: JUNKYARD*

The proposal, JUNKYARD, critically points to the lack of awareness of material and immaterial waste, like plastic, metal, paper, or electronic waste, caused by increased production and consumption, and technological development (See Fig. 3.7). Discussing the necessity of material conversion or waste recycling for a city, the students speculatively question ‘what could happen if an urban junk landscape, a junkyard, which is focused on transforming any waste and data, which is material and immaterial, into something valuable is structured in an industrial area of Ankara.’. With an approach that uses the power of waste to create a technological infrastructure, the students combine both practical and theoretical knowledge from many different disciplines, especially from technology, to be able to create perspective-changing understanding. Acting as conscious originators and manipulators of knowledge, they search for an urban landscape for a plausible future, which puts a continuous effort to phase out waste and try to discover new ways to improve the research and development of insufficient resources, both material and immaterial (See Fig. 3.8).

Based on Lefebvre’s argument that the pulse of the city beats in daily life, the students aim to develop a speculative scenario that an urban junkyard provides to be produced both thought and design by bringing together the junk and the human, with a cyber and physical transformation of material and immaterial things. The expectation is to

respond to the existing reality of the waste problem, especially important in terms of ecological, economic, and ethical dimensions, for reconstructing the physical and social environment. So, the students create an inclusive junk topography and dynamic structure thanks to technological mechanization, which works with conscious humans, an organized system, and ready-to-transform junk unity. Following Young's definition of 'speculative architect,' they create a 'narrative about how new technologies and networks influence space, culture, and community,' and 'where new forms of agency exist within the cities'.

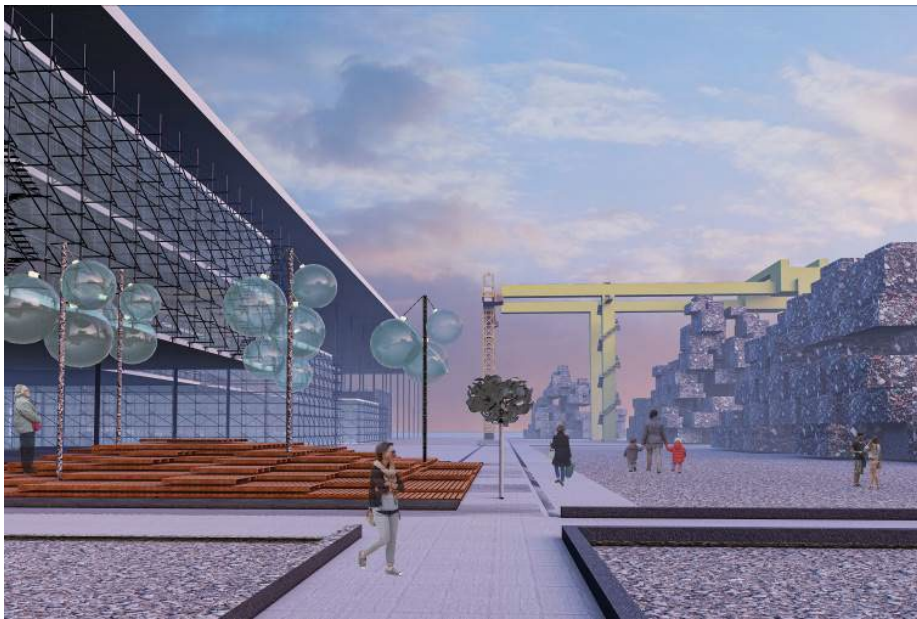


Figure 3.7 : JUNKYARD<sup>15</sup> by Fatih İbiş, Pelin Güç, Pelin Yalçın.

Their critical inquiry contains many different visualization strategies within itself, such as preparing a storyboard in the form of a comic book to express their what-if scenario, an animated section to show the technologies, techniques, and ideologies requirements for their alternative context, and a newspaper collage to present their position towards the existing governmental attitude towards junk and environmental waste. They also explore their ideas of cyber and physical transformation of material and immaterial things through the design process by sketching and making diagrams, except for using architectural instruments. Their effort is to move their critical thought on waste and junk from just an idea to something that has real-world implications and to conjure up their prefigurative future.

---

<sup>15</sup> To see more visual productions, see Appendix 5.

**URBAN JUNKYARD FOCUSED ON TRANSFORMING ANY WASTE AND DATA**

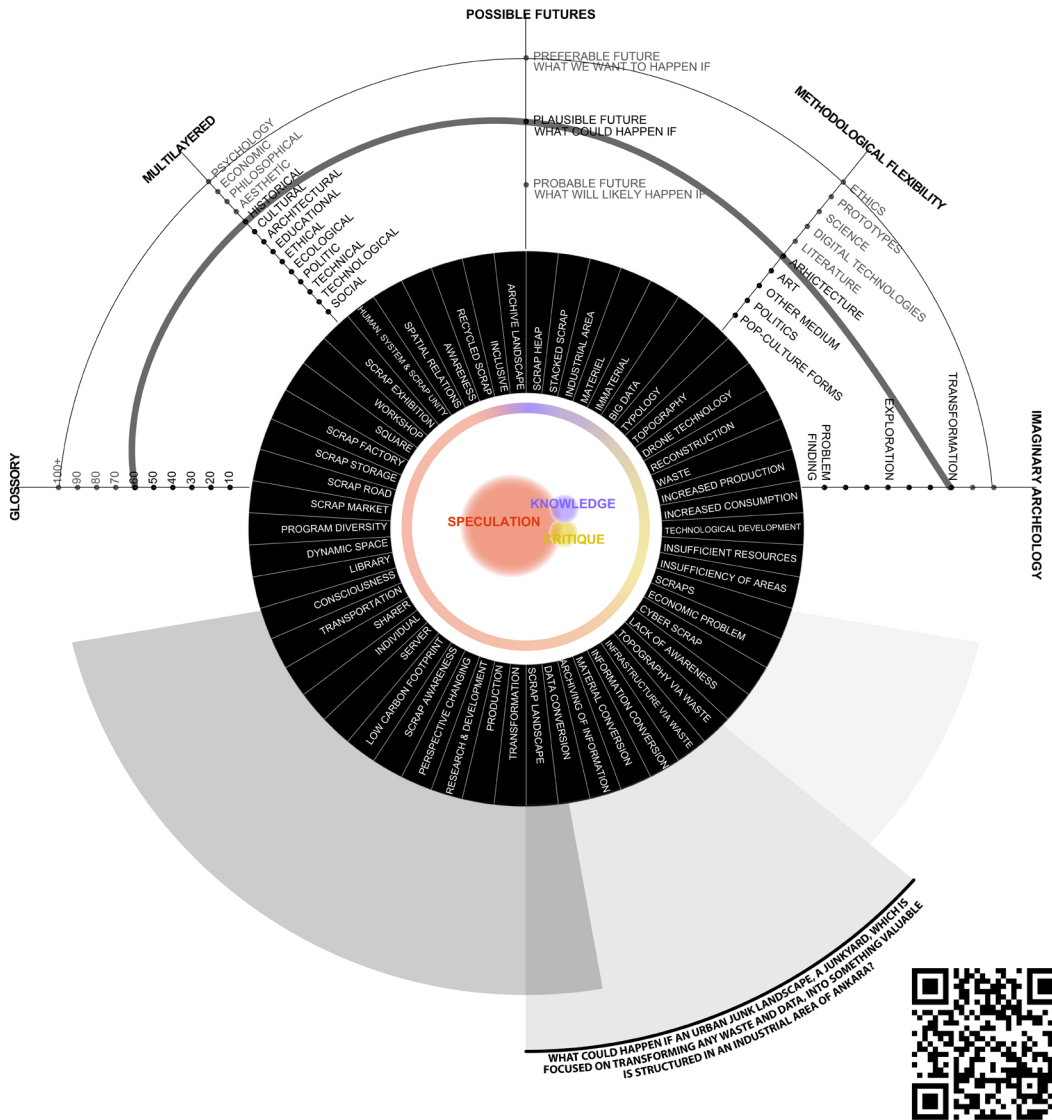


Figure 3.8 : JUNKYARD by Fatih İbiş, Pelin Güç, Pelin Yalçın.

*CASE 3: EARTH-DECONSTRUCTION*

The proposal, *EARTH-DECONSTRUCTION*, discusses the problems of the city being a concrete jungle, which led to the heat island effect and to the imperviousness of soil and water, the problem of the city fabric, which is prompted to lack of interactions, and the lack of awareness on energy consumption (See Fig. 3.9). With these observations about the city, the students intend to reconstruct the ground of the city, assessing future interventions with the potential of the soil and having regard to the food, water, economy, energy, and mobility factors. They critically question, ‘what if the highly despised earth covered the city like a blank canvas to structure a citizen-

oriented urban fabric, an innovative network organized in parallel with new climatic conditions, and bio-based environment, and a cyclical economy and energy.’ In this direction, for their context of the alternative present, they are searching for their new earth formation by taking advantage of bio-cemented soil as a new ground of the city that transforms the urban and architectural practices (See Fig. 3.10).



Figure 3.9 : EARTH DECONSTRUCTION<sup>16</sup> by Asya Soylu, Gökçe Ünlü, Nilsu Taşel.

For this speculative scenario, the proposal tries to reveal many different earth formation possibilities, including specific social, technological, technical, political, ecological, ethical, aesthetic, cultural, educational, economic, and architectural parameters, with the help of parametric design and incorporating relative humidity and temperature data of the city into the design. This transformation of the earth organizes architectural structures and programs constructed with 3d printing techniques, social environment, urban practices and functions, and production-consumption cycles, that is, a whole city. In this direction, responding to the existing situation as responsible and conscious intellectuals, the students try to achieve the image of a new city on their designed ground, prioritizing sustainable local materials, self-sufficient smart systems, and energy efficiency.

---

<sup>16</sup> To see more visual productions, see Appendix 6.



## NEW EARTH FORMATION BY TAKING ADVANTAGE OF BIO-CEMENTED SOIL

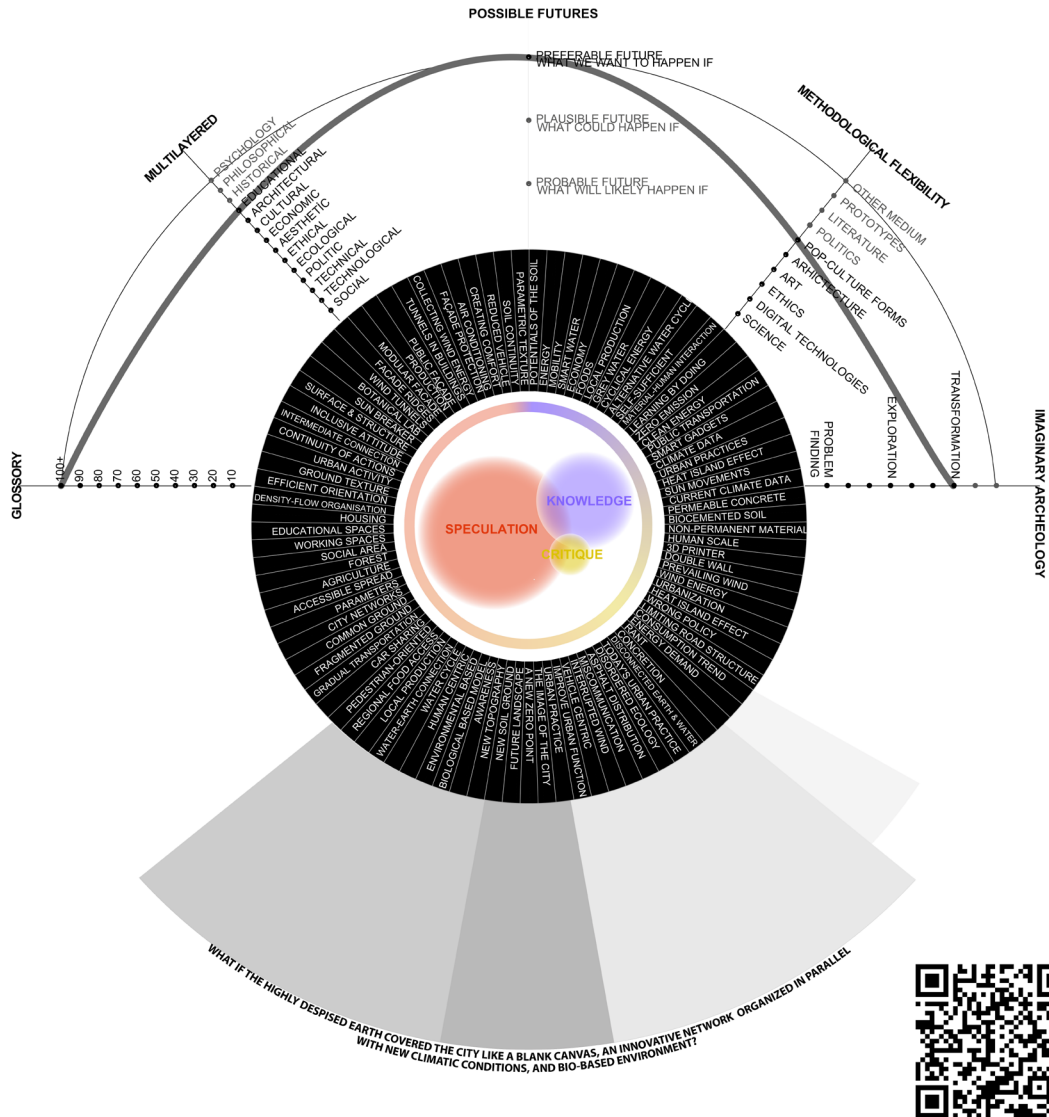


Figure 3.10 : EARTH DECONSTRUCTION's visual graphic.

Since they explore the possibilities, there is a continuous production process in which they negotiate multiple design options depending on specific data. The students produce critical and provocative ideas of alternative values with diverse mediums as tools for thinking and making. For instance, they experiment with new urban fabric possibilities to imagine the new ground they created via the parametric modeling tool, Grasshopper, which enhances the ways of exploration. Besides, they utilize the pop-culture forms like video-making, gif animation, and storyboarding. The graphic expressions other than architectural ones help them to show how their significant parameters shape their design idea and how they respond to the existing paradigm by

taking these parameters into account. Ultimately, they materialize an alternative world built in a factual and fictional blur.

*Case 5: BIOTIC URBAN NETWORK*

The proposal, BIOTIC URBAN NETWORK, is built on the criticism of the problematic relationship between the city and nature caused by power policies, together with a change in urban communication forms and increased energy consumption and carbon emission (See Fig. 3.11). It focuses on revitalizing the urban metabolism, which has been eroded by industry, economy, and non-renewable energy elements together with the unconscious consumer, with an integrated urban network fabric organized with a new city algorithm, taking into account food, climate conditions, and renewable energy. The students speculate a potential scenario of an experimental bio-urban life model occurring in the coexistence of biotic space, urban space, and urban action in order to preclude the weak dialogue between city, citizen, and nature for their preferable future. They ask what we want to happen if we have a chance to design city life, infrastructures, and institutions, in short, urban metabolism, with especially the knowledge of current biology, ecology, and technology (See Fig. 3.12).

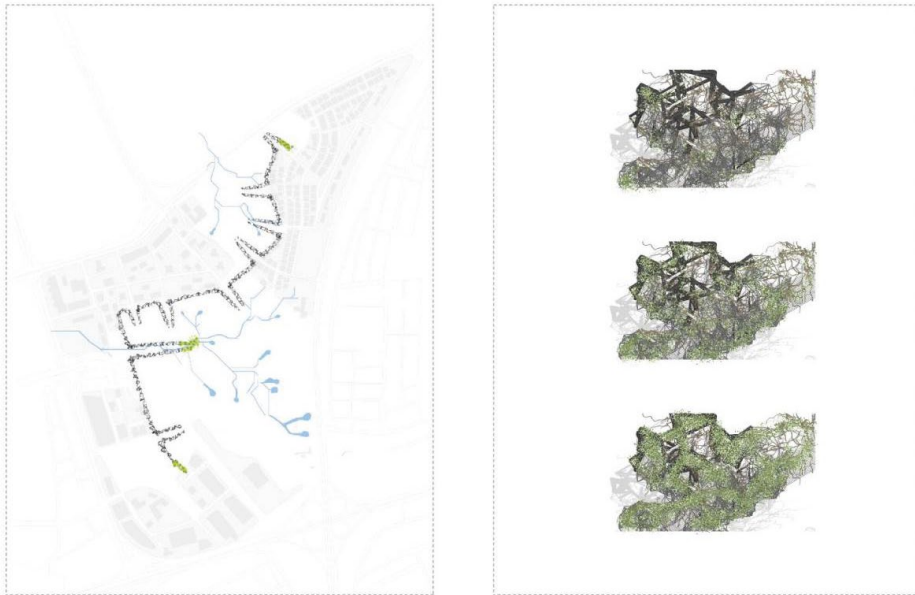


Figure 3.11 : BIOTIC URBAN NETWORK<sup>17</sup> by Ece Melisa Tunca, Oğuz Kağan Erge, Zeynep Göktoprak.

---

<sup>17</sup> To see more visual productions, see Appendix 7.

## EXPERIMENTAL BIO-URBAN LIFE MODEL

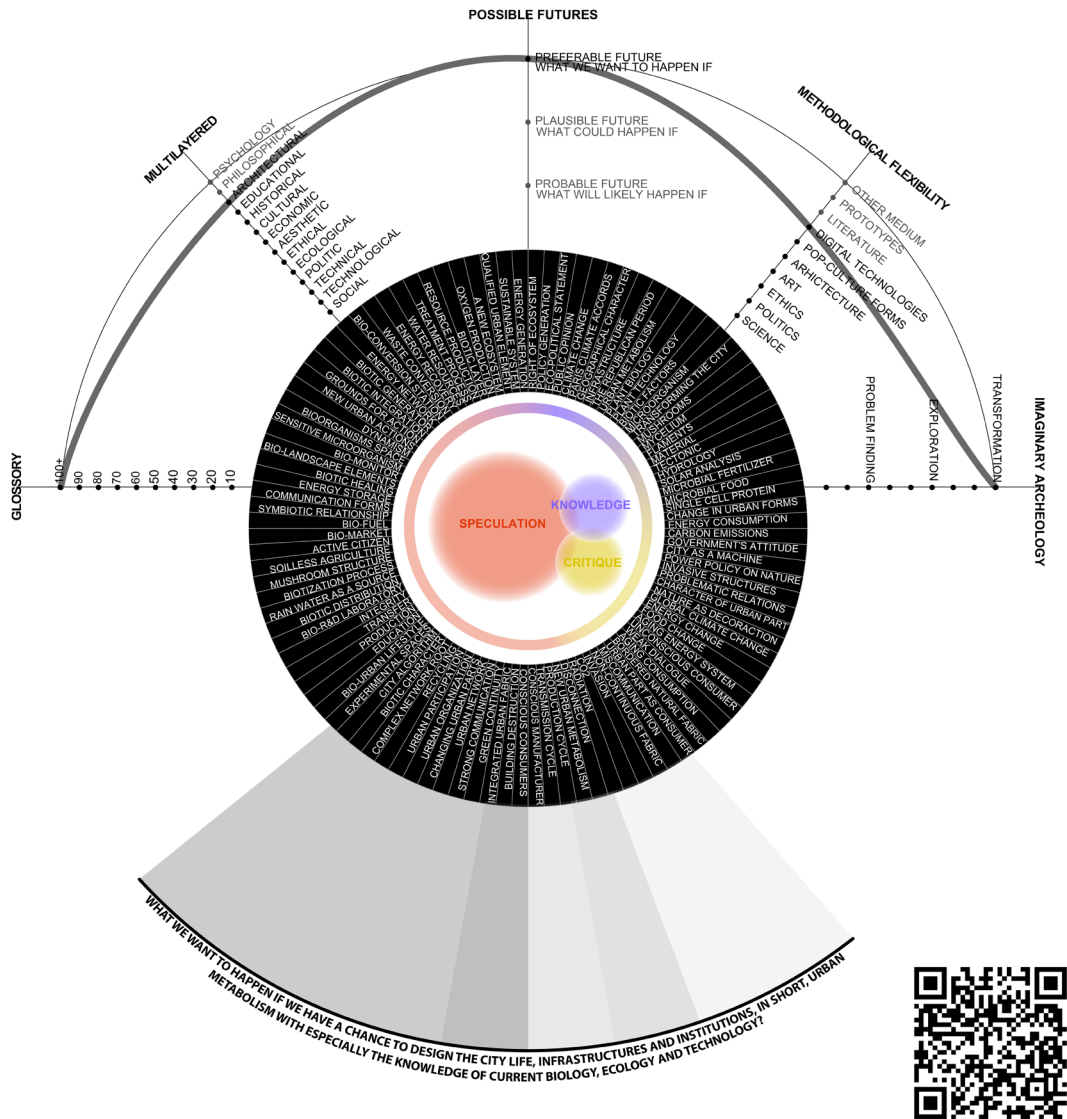


Figure 3.12 : BIOTIC URBAN NETWORK 's visual graphic.

In a way, their speculative theory is based on the idea that the urban biotic network can transform and cure the whole city with a new urban metabolism that guides the production and transmission cycle with its biotic character and forms a sustainable ecosystem with plant biology and technology. The students try to enhance their discourse throughout the design process by grounding their critical thoughts on the solar analysis they made, several biological details, Eco-Political Statement and the Paris Climate Accords, and more.

In the end, on the Sögütözü Neighbourhood, which they see as a problematic area, they construct a sample of the integrated biotic urban network that a strong urban

interaction with green continuity, a bio-urban lifestyle with citizen involvement, qualified urban spaces and elements with symbiotic relations, biotic layers for conscious action, and energy efficiency is the focus. This network attaches a new conscious face to the city, as the responsible actors, the students, think.

They seek the expression of an urban biotic network that acts as an experimental environment for the citizen and organizes the whole city with an open set of methods. The students who first make collages, sketches, and diagrams to express their criticism try several parametric design alternatives for urban networks with the help of digital tools. Including their research into bio-materials and microorganisms that help the transformation and the data of energy and sunlight analysis, they trace the structural transformation of a city through fragmental images throughout the design process to negotiate multiple contexts. The instruments of architecture such as plan, section, and axonometric drawings and the pop-culture forms like gif animation help to support their speculative scenario and lead to deeper understanding and diversified design possibilities for their prefigurative futures.

#### *Case 6: NEXUS*

The proposal, NEXUS, is critically engaged with the present situation of increased out-of-human scale constructions that lead to the non-natural urban ground and the disconnection of urban voids (See Fig. 3.13). Ascertaining from the old city plans of Ankara and several historical references, the students intend to reconstruct the city's definition by structuring a polyrhythmic urban fabric that reconfigures urban ground and voids. It is because they consider the social and environmental impact of the urbanization that often comes with the concrete jungle, of the inaccessible urban fabric where the citizen is excluded, of the discontinuity of green areas, that is, of the situations that set urban boundaries as a problem. They search for a harmonic city structure for their plausible future by asking what could happen if a catalysator, NEXUS, has the capability to structure a polyrhythmic urban fabric by weaving the urban voids, urban network, and urban ground to rebuild the urban rhythm. So, the proposal embodies a speculative scenario that presents an urban network connecting various cultural points in the city, walkable urban ground focused on observation-inspiration-exploration-mutual production, and the urban voids integrating the green spaces and city components designed with sustainable materials (See Fig. 3.14).



Figure 3.13 : NEXUS<sup>18</sup> by Bengüsu Yeşiloğulu, Gökhan Sagun, İrem Malgaş.

The students conceive a catalysator, NEXUS, as a connection element that provides vertical urban transport and an uninterrupted interaction network, allowing the continuous green texture and a new city corridor. In this way, they try to form a polyrhythmic urban fabric that provides uninterrupted interaction in the city. So, it can be said that the students try to depicture a multi-layered transformation on an intellectual basis by including the social, ecological, historical, technical, cultural, philosophical, and architectural details. Within the theoretical and practical knowledge, they propound fictional propositions to outline yet-to-exist alternative worlds in the way of exploring future implications of emerging urban developments, also by taking into consideration the relation between architecture and the social entity.

With an open set of methods, they create their own design language to materialize their ideas and ideals. Firstly, they produce collages, sketches, graphic expressions, and animated images to depict the image of the city in which they criticize and to try out imagined city connections, focuses, and relations. Then, they support their ideas with references from the literature. Besides, they try to figure out the harmony in the urban fabric together with various possibilities of urban connections, urban voids, and the urban ground, with fragmented images primarily by using the instruments of architecture. All of their production of city images has a narrative quality to inquire

---

<sup>18</sup> To see more visual productions, see Appendix 8.

through the actions of designing. In the end, the students propose a more critical vision for their alternative future.

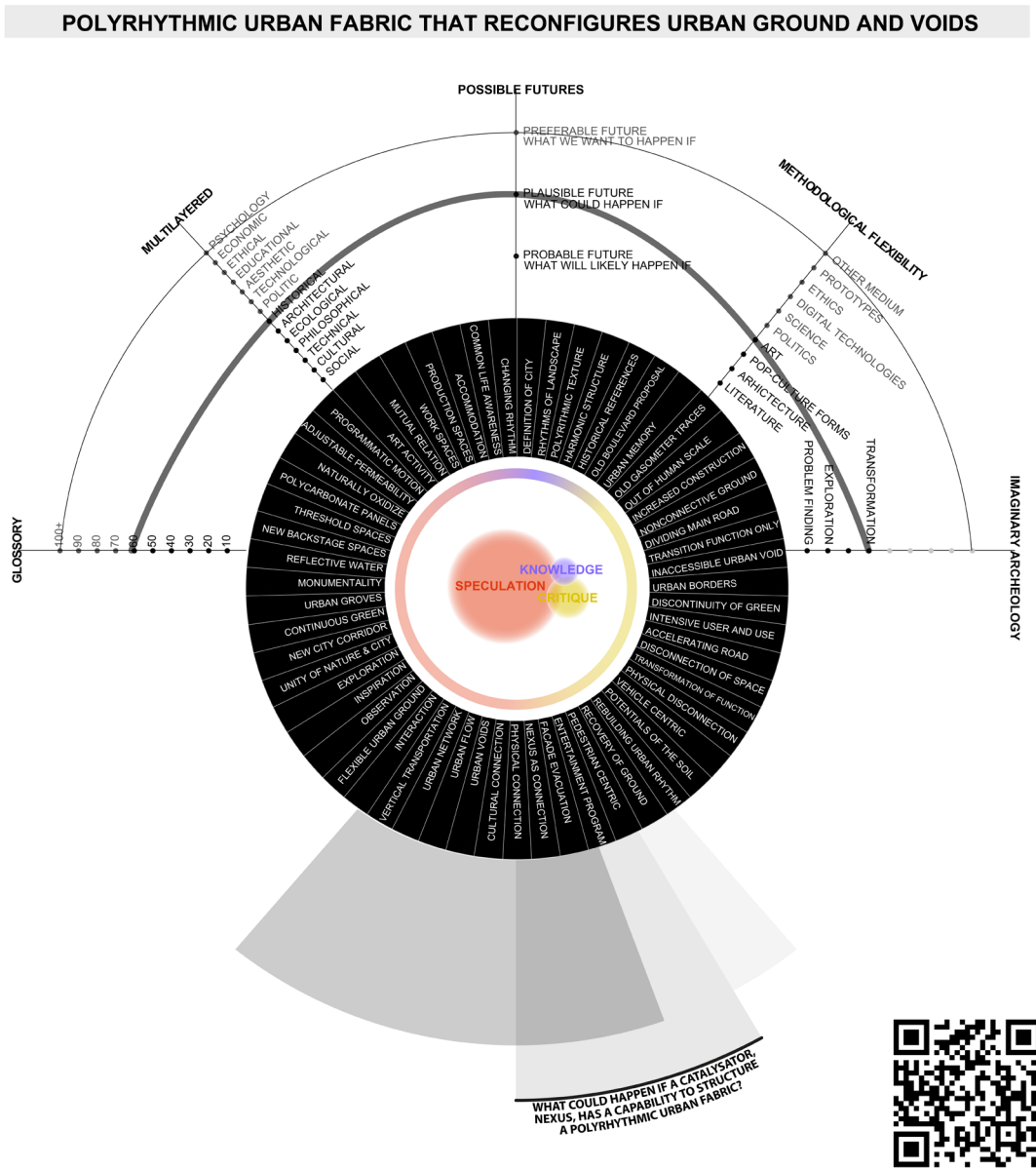


Figure 3.14 : NEXUS’s visual graphic.

*Case 7: COMMON SPACE*

The proposal, COMMON SPACE, takes a critical stance against the urban ground confined to certain borders in Ankara and the shopping malls that cause limited publicness (See Fig. 3.15). The students observe that the shopping malls act as a city center and are inadequate for creating publicness regarding economic, spatial, and social aspects. Being inspired by Stavros Stavrides’s book ‘Common Space,’ in which common space defines as essentially a process of creating a space that emerges through

common practices, they think that these common practices must be well beyond the confines of capitalist society, developing more collective and sustainable ways. At this point, they set out to create a common space around Eskişehir Road, which is the area where shopping malls are located most frequently in Ankara. For that, they ask what will likely happen if a collective and sustainable common space is structured as a public urban ground with social, spatial, and programmatic diversity (See Fig. 3.16).

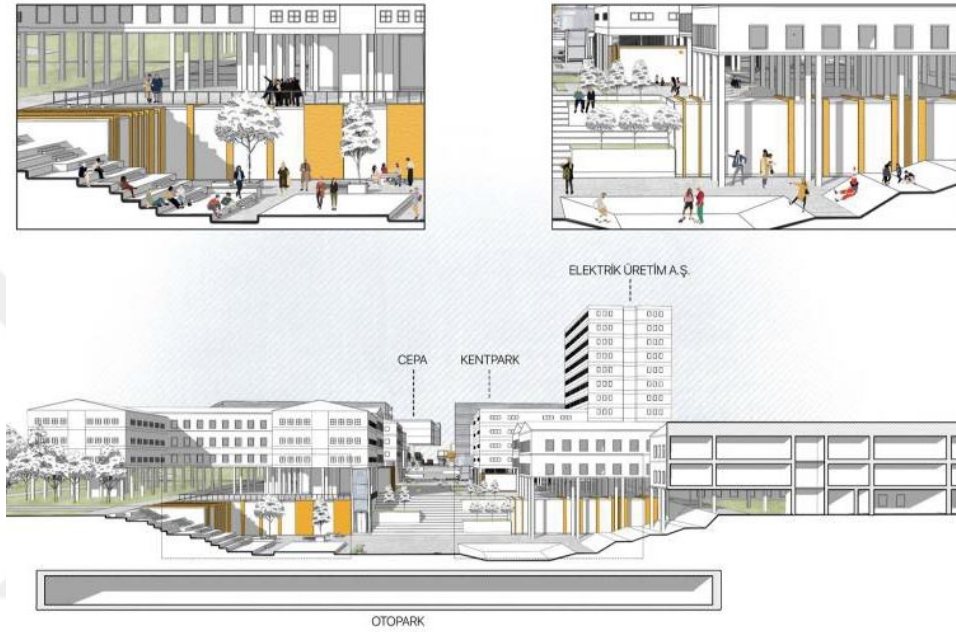


Figure 3.15 : COMMON SPACE<sup>19</sup> by Ebrike Karaca, Hilal Etleç, Merve Kıratlı.

The speculative theory is based on the potential of the urban landscape created by a situation where the continuity of urban ground is not interrupted by vehicles and private places; that is, it is left to the citizen, their diverse actions, and green areas. The transformation of public spaces the shopping malls form is achieved through an open landscape created by structuring a continuous connection and interaction between shopping centers and the multi-purpose spaces and actions that this landscape contains. Also, they make existing environmental knowledge a part of the transformation by making solar and radiation analyses and taking into account the prevailing wind direction. The interconnections and collectivism in this urban ground are a reflection of their critical attitude toward the definition of the public space.

<sup>19</sup> To see more visual productions, see Appendix 9.

## COMMON SPACE FOR CONNECTION AND INTERACTION

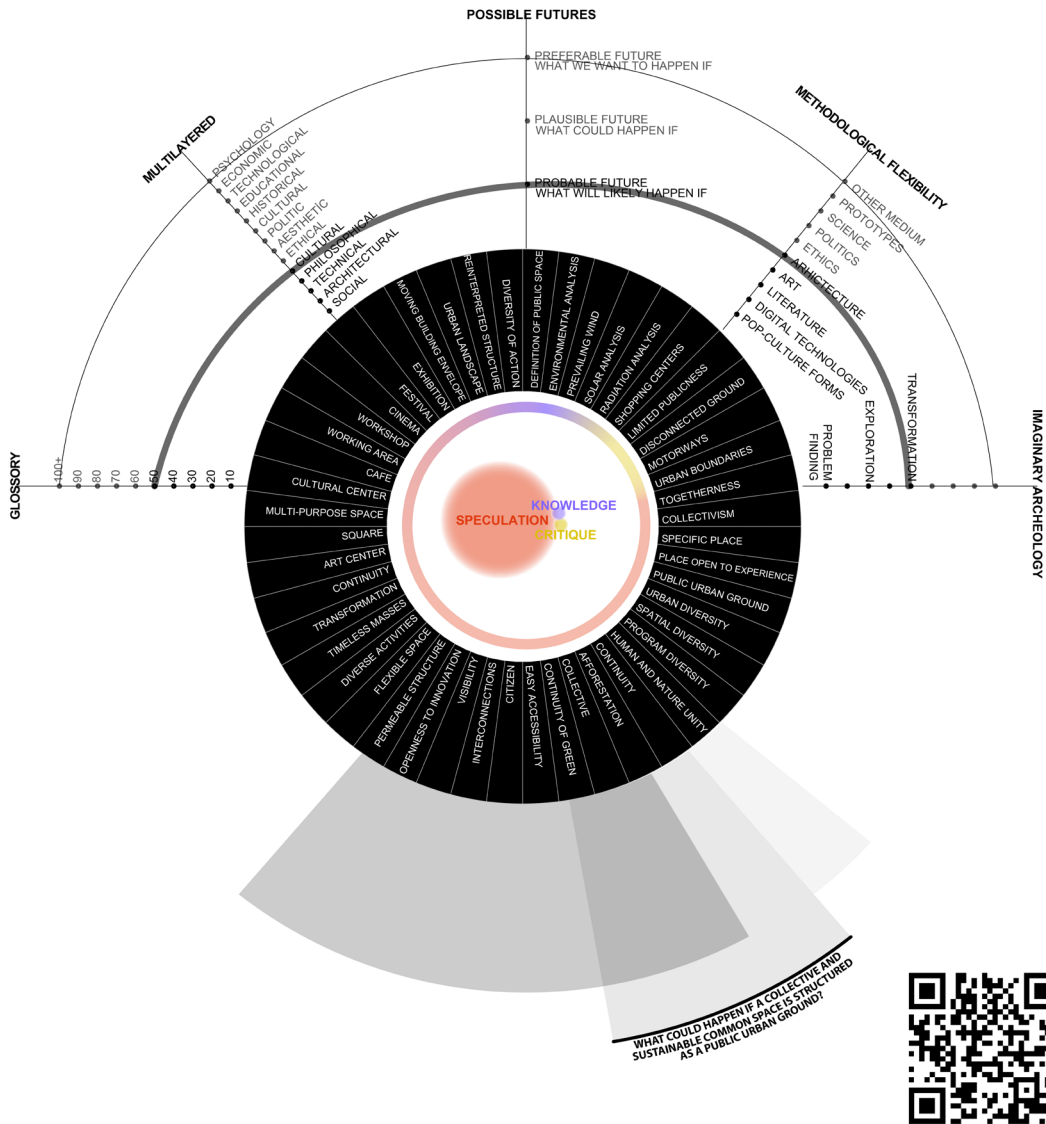


Figure 3.16 : COMMON SPACE 's visual graphic.

Connecting their critical idea and visual aspects of it in their inquiry, the students benefit from combinations of media that help as methods to tell a scenario. The analyses via digital tools, collages, the comic book, graphical and architectural expressions, animated images, and video, all those productions weave the narrative to comprehend what the question of ‘what if’ represents for the sake of the discussion. They represent a collective and sustainable common space in everyday contexts. In other words, they depict the speculative scenarios in a clear and intelligible manner where the existing situation is critically rethought, and the alternatives are explored.

*Case 8: BOULEVARD XYZ*



The proposal, BOULEVARD XYZ, concerns the city center losing its user and becoming just a transitional zone caused by changed functions, decreased green spaces, heavy vehicle traffic, and the lack of urban liveability (See Fig. 3.17). It develops a perspective against the city developed contrary to the master plans envisioned for the city in history. The students who intend to take action to reveal the old values of the city center and its hidden possibilities search for ways to make the center of Ankara attractive again for the citizens by transforming the main boulevard as a backbone. In a way, they question what will likely happen if the main boulevard in the city center regains its value in urban memory (See Fig. 3.18).



Figure 3.17 : BOULEVARD XYZ<sup>20</sup> by Elif Nur Bek, Zeynep Akdemir.

They state that a new boulevard designed in sustainable, functional, and human-centric ways can create a new meaning for the area that has lost its meaning. In other words, the students try to reconstruct the meaning of the city by evaluating the existing structure in a way that critically engages with the present situation. The proposal tries to introduce; cleaning the occupying urban elements on the boulevard, reducing the vehicle speed on the road, creating a bicycle path, removing the borders of the governmental buildings, providing green continuity, revitalizing the passages and terraces, designing pedestrian-friendly streets, and constructing low rise buildings

---

<sup>20</sup> To see more visual productions, see Appendix 10.

would be the essential responses towards the existing to achieve that meaning. The students accept that there is a diversification of the ways to understand complex urban problems and that the proposal demonstrates just one of the alternatives in response to them.

**NEW BOULEVARD DESIGNED SUSTAINABLE, FUNCTIONAL AND HUMAN-CENTRIC WAYS**

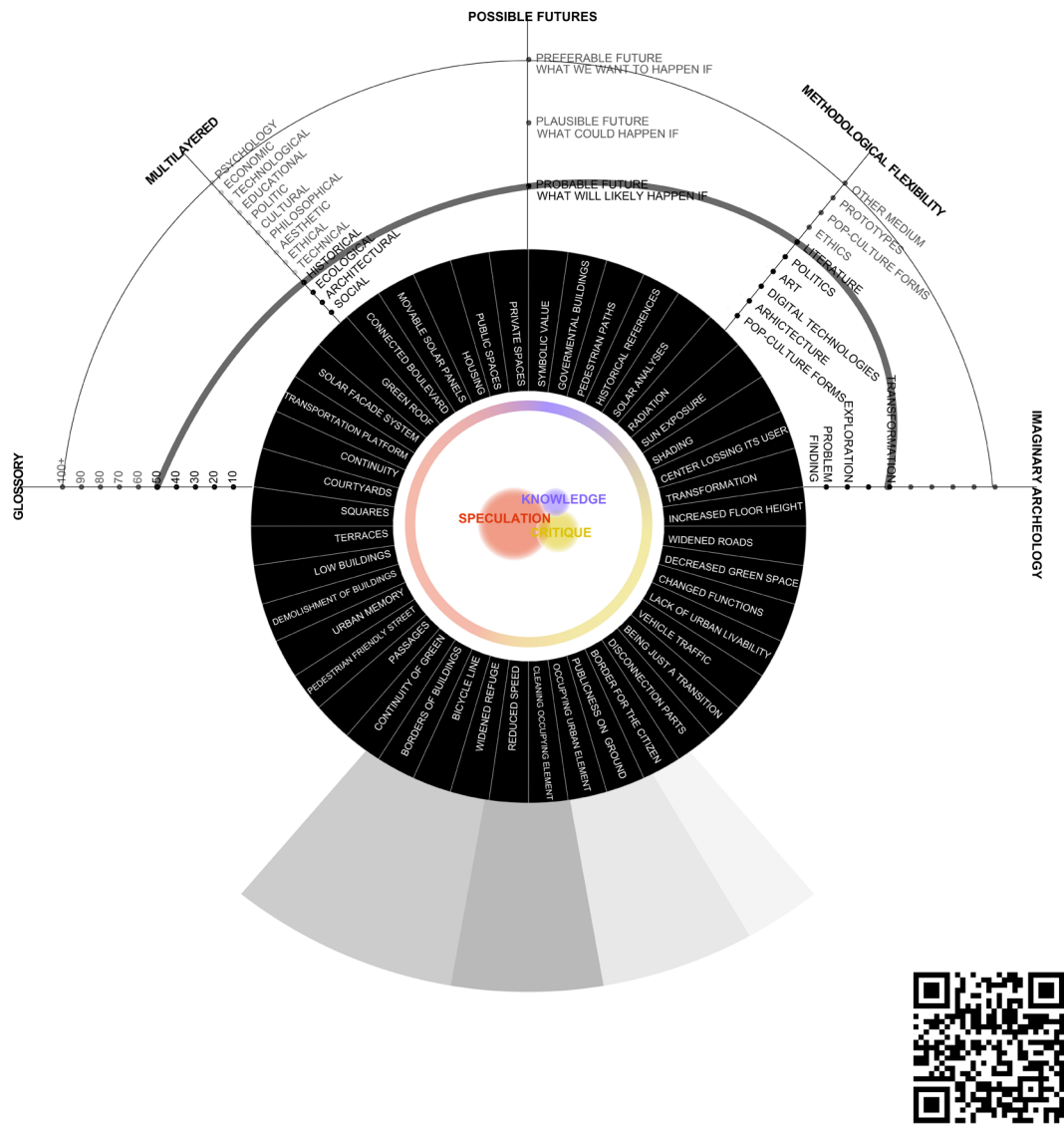


Figure 3.18 : BOULEVARD XYZ's visual graphic.

The students get to the bottom of the necessity of the transformation of the boulevard with provocative collages and diagrams and translate each step they proposed for the transformation into materiality to investigate an image of a possible city center. The students believe that if they are able to describe such future scenarios, they can also try to realize them as responsible architects. In order to be able to imagine life on the

boulevard with new speculative ideas, they produce sustainable, functional, and human-centric design possibilities for the boulevard through various sections, plans, and visual expressions. The digital analysis tools support their ideas, for example, radiation and solar analysis for the transportation, shading, or green texture details. So, their creative inquiry contains many different visualization strategies.

*Case 9: THE REUNION*

The proposal, THE REUNION, introduces a critical vision of industrial zones in the city of ANKARA because the student observes that these types of areas as places that ignore human needs and occupy the urban ground, which grows horizontally with inadaptable and non-functional quality (See Fig. 3.19). Also, by considering these kinds of industrial zones like broken machine, he discusses that the standardization of structure and function in these places harm the dialogue between the city and the citizen. So, focusing on the place, Başkent Auto Industrial Zone, a problematic area for the reasons stated, he intends to repair the zone as a strategy by leaving the occupied urban ground to the city and urging the vertical growth for increasing green areas and making it possible to urban interaction.

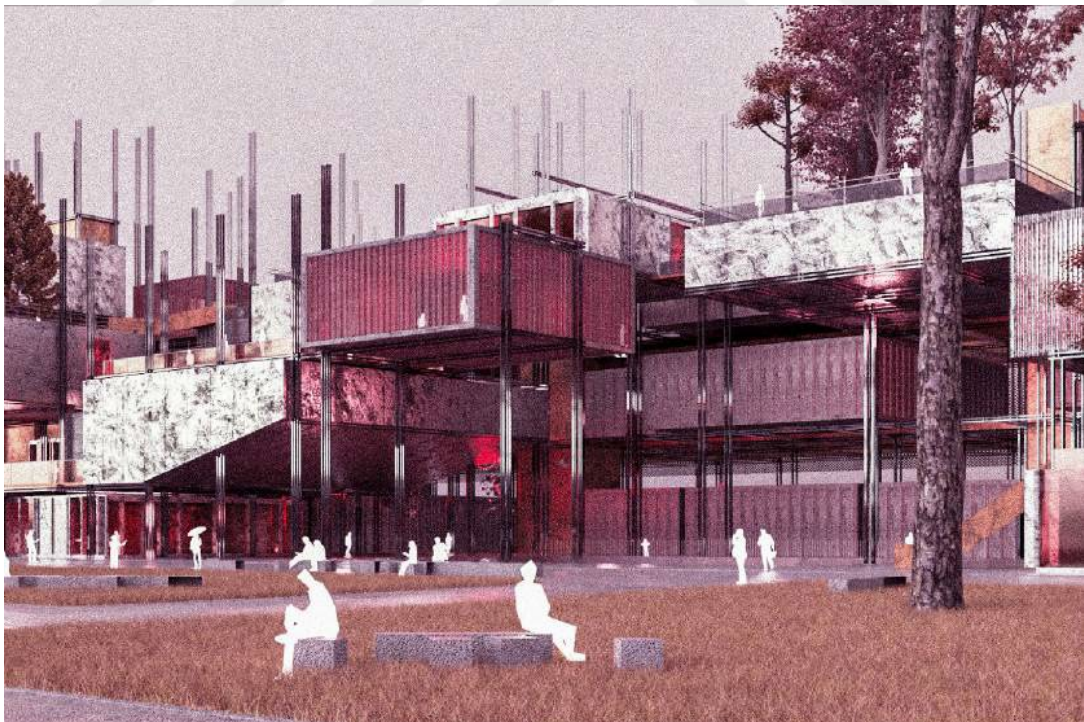


Figure 3.19 : THE REUNION<sup>21</sup> by Yakup Cesur.

---

<sup>21</sup> To see more visual productions, see Appendix 11.



The statement is that, with alternative technological, technical, and mechanical infrastructures, it is possible to create a structural system for the industrial zones that can accommodate diverse social, cultural, and physical units in a hierarchical order of relations. Speculative thought is to create a structure that simplifies the repair process of cars, establishes an integrated layout that increases the possibilities of interaction between programs and their users, and, most importantly, provides integrity to the urban landscape.

Also, this designed industrial structure can grow vertically with its special structure details in the future and reveals its ethical understanding by recycling wastes and leaving the ground green, and caring about human needs. So, it can be said that by positioning against the existing standardized structure of the industrial zone with current knowledge, the student develops a rational response to build a new meaning in these kinds of industrial zones.

The design process of problem finding, exploration, and transformation takes shape with critical visual expressions of all the concerns of the design attached importance. The systematic exchanges between conceptual and figural arguments of the proposal enhance ways of exploration. The student critically thinks about existing problems over several images such as photographs, collages, and diagrams, representing his ideas on the structure and the scenario with both graphic and architectural expressions. He tries to produce pictures of imagined technological, technical, and technological infrastructure by contextualizing them in his design. These vision and visual expressions open the way for unexplored insights, ideas, and views, so he continues to develop and reproduce his scenario for a far future and pursues another what-if question. Thus, as an example of open-ended design, the proposal points to a continuous process that can develop with endless interpretation and is always supported through re-production

#### *Case 10: OIKOS*

The proposal, OIKOS discusses the possible ecological crisis effect in the city due to the rapid urban development, population growth, and food demand. It criticizes the lack of urban voids and green space (See Fig. 3.21). With these observations, the student puts forward the concept of ‘Oikos’, called the unit where all kinds of vital activities of people in ancient Greek civilization take place, with a critical attitude that

considers the unity of agricultural life and urban experiences. She searches for the future Oikos in the city, of Ankara, by critically asking, ‘what will likely happen if a holistic neighborhood transformation where the green and agricultural areas, social and vital activities co-existed to avoid the ecological crisis effect?’ (See Fig. 3.22).



Figure 3.21: OIKOS<sup>22</sup> by Çağlısu Kardeş.

The proposal aims the transformation of the existing with its energy transformation-oriented structure knowledge such as hydroponic production, aeroponic production, aquaponic production, waste separation, and future-oriented steps such as soilless agriculture. The speculative theory is that a neighborhood that acts with an ecological consciousness can create ecological memory and increase human interaction. The visual expressions produced to explore the possibilities of this neighborhood and the coexistence of agricultural life and urban experiences in the city show the creative vision and open a debate for possible futures.

---

<sup>22</sup> To see more visual productions, see Appendix 12.

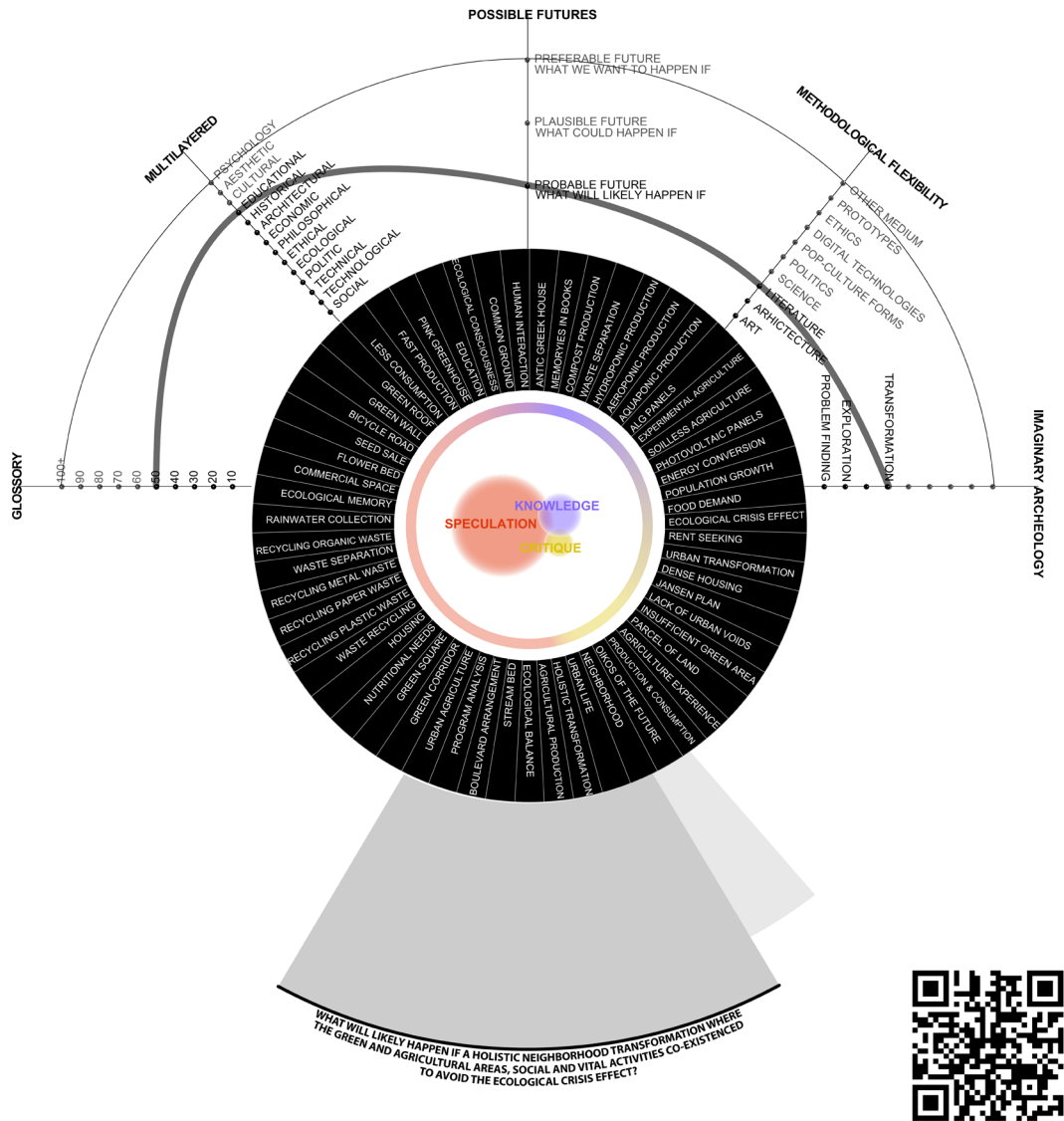


Figure 3.22 : OIKOS's visual graphic.

*Case 11: SEPERATE*

The proposal, SEPERATE, takes a critical stance against the the weakening of the sense of belonging and the fact that accessibility to basic needs is not possible in today's accelerated living conditions (See Fig. 3.23). They observe how important the interaction with the immediate surroundings has gained, especially in the pandemic situation. So, they focus on the interactions that people establish with their immediate surroundings and speculate a potential scenario of the neighborhood structure of the future developed thanks to technology. They critically question for their preferable future, 'what if a digitally transformed neighborhood with the building materials of the

future, communication codes and technological living units and personal transportation vehicles?’ (See Fig. 3.24).



Figure 3.23 : SEPERATE<sup>23</sup> by Adir Rumet Birtane, Levent Batu Özenalp, Yusuf Kimyon.

In a way, with the prior knowledge from the fields of technology and ecology, they response to the existing problem of the need for organic food and spatial miscommunication in the city by aiming a technological revolution. Developing a pod system which works a system that provides both vital and social activities together, multiplying with the parcel system built with recyclable wastes, and creates an order in which vertical agriculture can take place and transportation will be easier, the students create a speculative scenario that intends to transform the city socially and physically.

They visually materialized their pod system with technical details and place the system in the urban context to experience their future city as a research. Their creative visual productions give them the opportunity to reveal the hidden possibilities in the city, and the representations of a new society and fictional urban scenes.

---

<sup>23</sup> To see more visual productions, see Appendix 13.



## A TECHNOLOGICALLY TRANSFORMED NEIGHBORHOOD

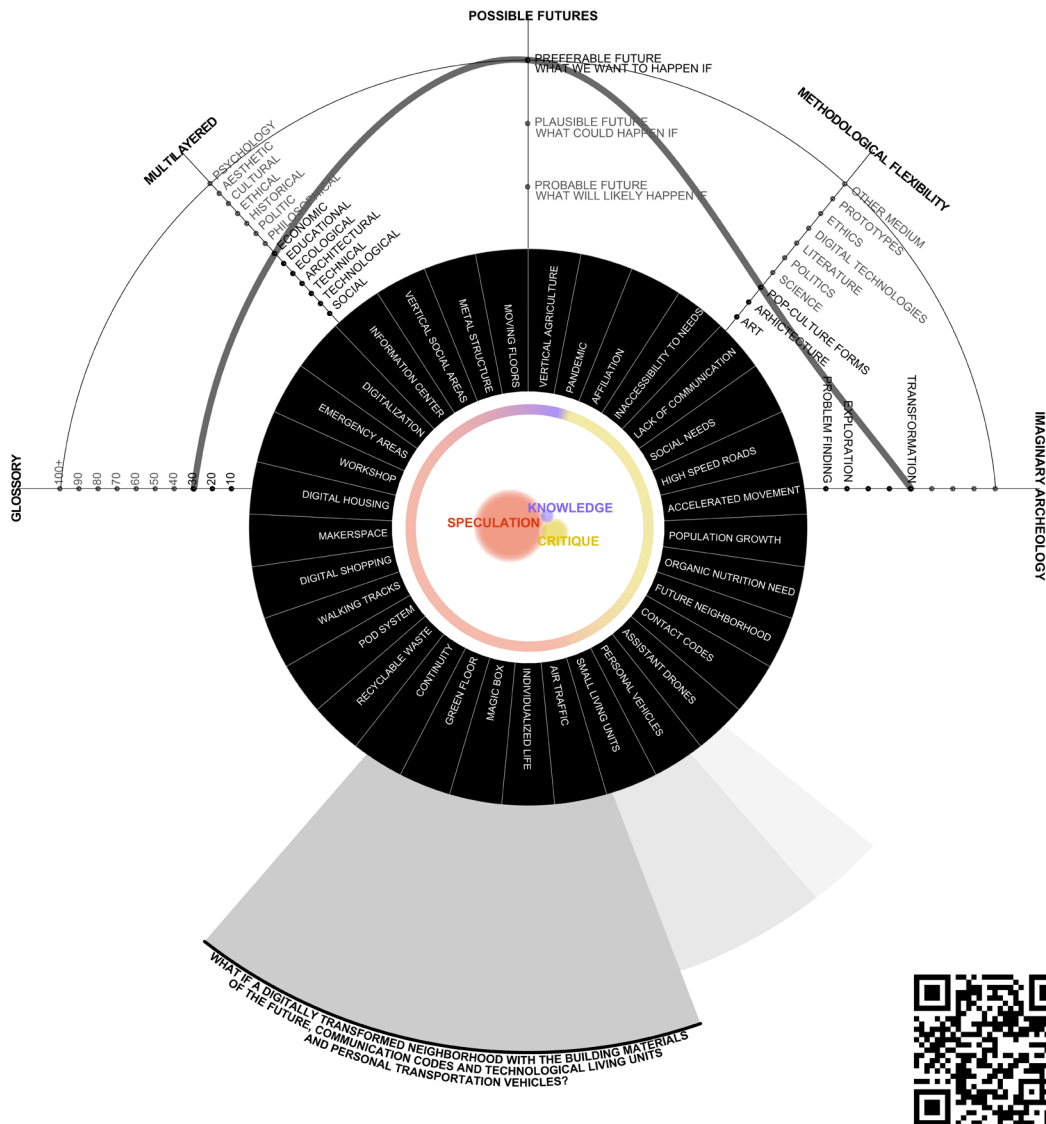


Figure 3.24 : SEPERATE's visual graphic.

### Case 12: BETWEENNESS

The proposal, BETWEENNESS, discusses the notion of in-between time and in-between space, in company with the definition of the city and landscape, through the a functionless urban square in the city (See Fig. 3.25). They observe that the factors, such as the road as border, traffic, high masses, lack of facade integrity, visual pollution of signboards, lack of interconnection of contexts, lack of green areas, reduce interaction in the square and prevent it from being a sharing-oriented and multi-layered structure. For that reasons, they introduce their creative thoughts, critically asking ‘what will likely happen if a transformed urban square that can acts in-between time and in-between space allow randomness and multiple interactions?’ (See Fig. 3.26).



Figure 3.25 : BETWEENNESS<sup>24</sup> by Elif Nur Bek, Zeynep Akdemir.

The proposal embodies a scenario that presents an arrangement of urban ground that includes action intersections, cares about the richness of sharing, together with the unity of public and green space. The students believe that an urban square where such an accidental or planned social interaction can take place will be an important part of the values of the future. So, embracing the many tools available for crafting not only things but also ideas, they try out their ideals and exhibits their vision with graphical and architectural details.

*Case 13: METROPOLIS BODY*

The proposal, METROPOLIS BODY, critically points to the area of National Intelligence Organization, which is surrounded by a wall, interrupts the city and creates a border (See Fig. 3.27). Addressing the concepts of urban body and urban transformation, the project discusses about transforming urban practices, power relations and ground interruptions in the city. So, the concern is to respond to the existing reality of these urban problems by changing meaning of the wall from a border to an inviting factor. The student critically question ‘what if an human-orientned urban

---

<sup>24</sup> To see more visual productions, see Appendix 14.

structure that is constantly under construction and constantly transforming, can act like a urban body, thanks to an organism in which the wall changes shape with mathematical codes?’ (See Fig. 3.28).

**A TRANSFORMED URBAN SQUARE THAT CAN ACTS IN-BETWEEN TIME AND IN-BETWEEN SPACE**

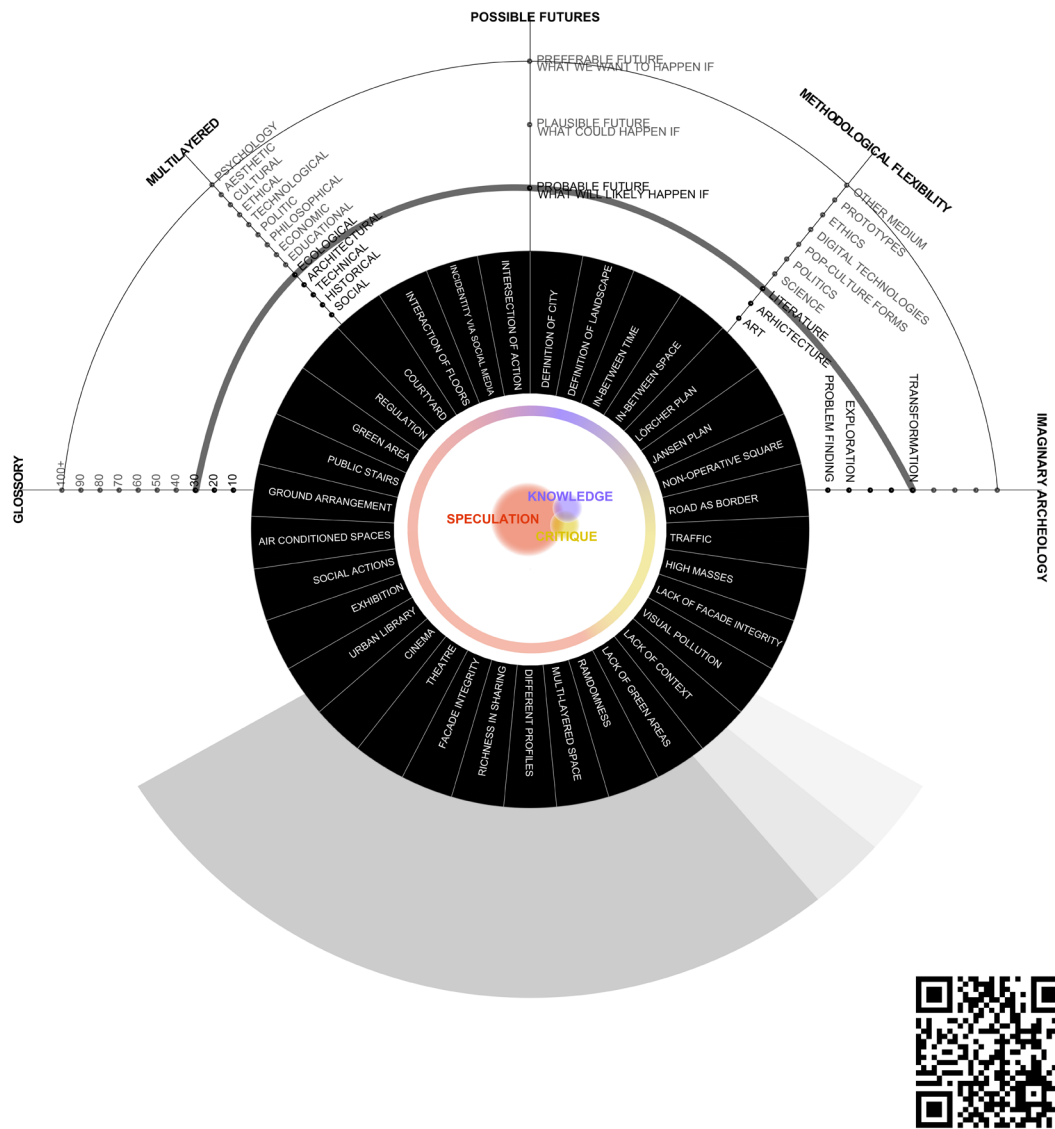


Figure 3.26 : BETWEENNESS's visual graphic.

The speculative theory is that it is possible to create a new habitat, which functional diversity of housings and different socio-cultural groups take place, via digital software and 3d printer, prioritizing the human domination. With this provocative idea, the student makes experimentation on the shapes of the transforming wall via digital tools, concerning the new habitat where the urban practices and urban voids redefined.

His critical inquiry with an observative and reflective point of view contains many different visualization strategies to experience the habitat he would like to create. It is an continuous productive process which he explores the possibilities of new forms of agency exist within the cities.

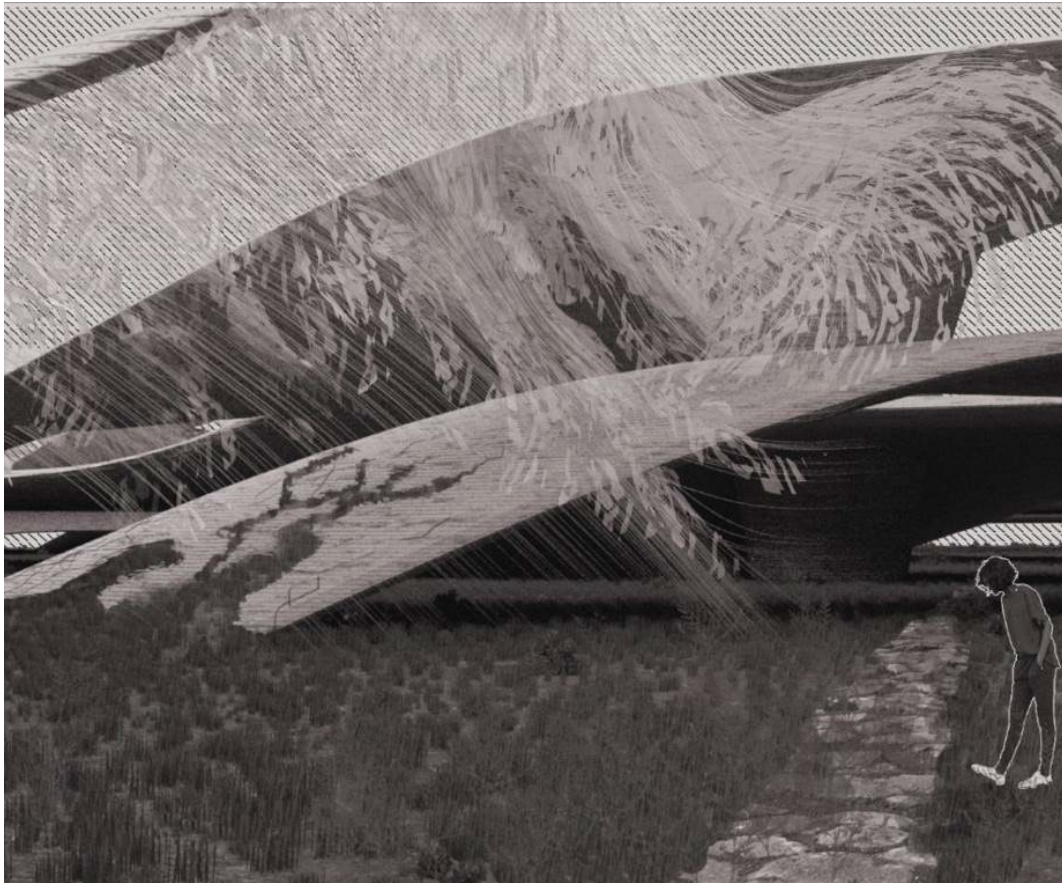


Figure 3.27 : METROPOLIS BODY<sup>25</sup> by Alperen Pehlivan.

#### *Case 14: THE WATER*

The proposal, THE WATER, presents with a critical observation that although there are many areas in the city where the citizens can interact with water, they are not able to access these possibilities due to the lack of urban landscape near these areas (See Fig. 3.29). With the knowledge of landscape infrastructure theorem, they intends to create an urban landscape that makes people a part of the ecosystem, considering the relationship between nature and public space. So, they ask ‘what will likely happen if an experimental urban landscape near a lake, called Mogan, that will both improve the ecosystem and increase interaction with nature is designed?’ (See Fig. 3.30).

---

<sup>25</sup> To see more visual productions, see Appendix 15.

AN HUMAN-ORIENTED METROPOLIS BODY AS AN URBAN STRUCTURE

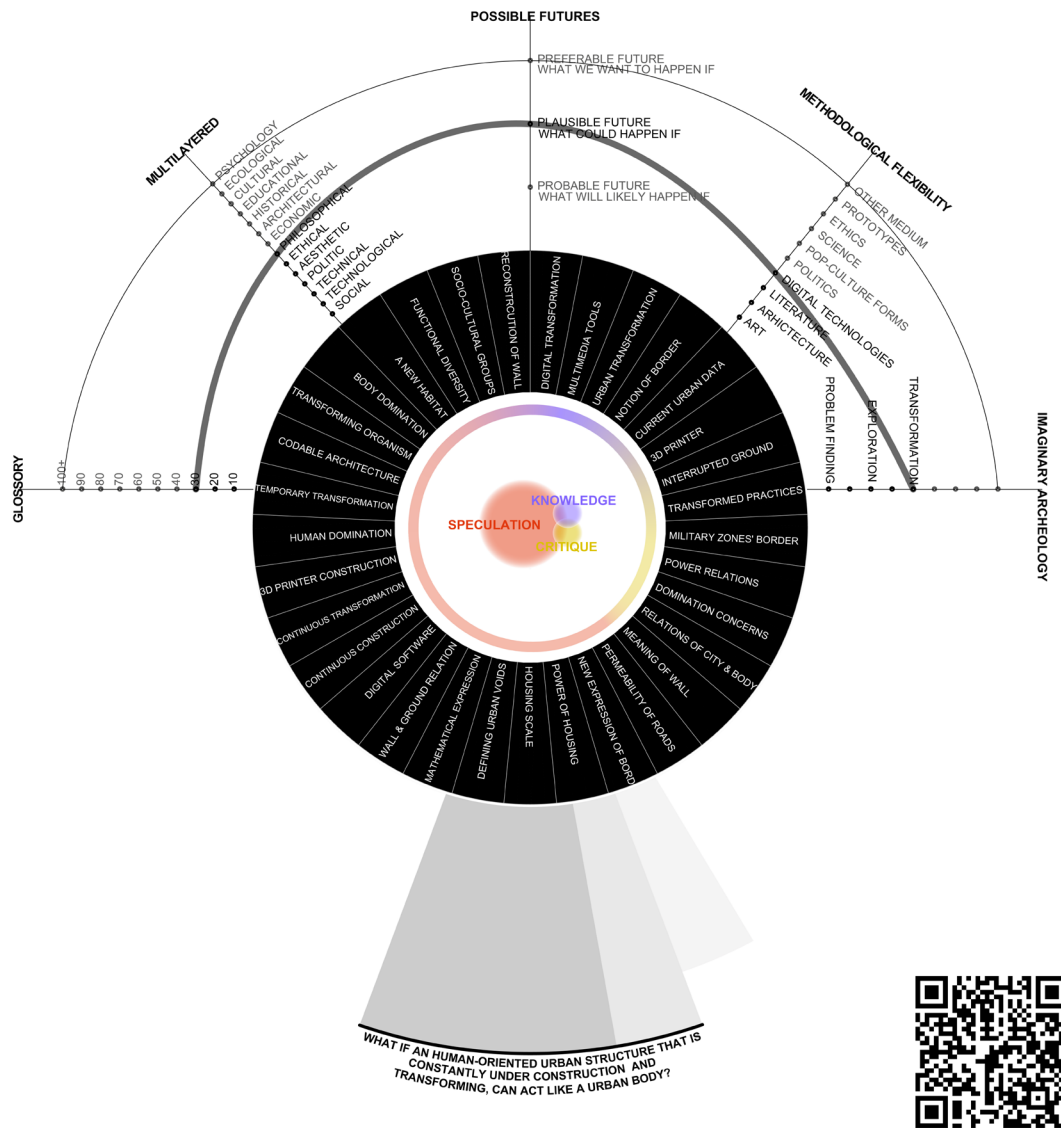


Figure 3.28 : METROPOLIS BODY's visual graphic.

They believe that they respond to the lack of interaction with nature by leading such an ecosystem. Their ecosystem contains both ecology, human-being and information. In accordance with that, they prioritize the life diversity and climate conditions, create information zones that aims to produce the ecosystem knowledge, and form the discovery and activity zone connected with the water for the citizens.

The concern is to increase the interactions by transforming the existing structure of the area near the lake. The students express their interaction zones with fragments to reassess future contingencies in creative ways, as parts of their imaginary archaeology. Each their fragments uncovers a hidden alternative of various events and differentiated spaces of their ecosystem.



Figure 3.29 : THE WATER<sup>26</sup> by Damla Özden, Esra Çopur, Gülşah Karagöz, Selahattin Nacar.

#### *Case 15: THE KITSCH*

The proposal, KITSCH, bases its criticism on the urban objects and the urban spaces which can be evaluated under the definition of kitsch, defined as something that seeks to arouse emotions in primitive ways, although it has no artistic value (See Fig. 3.31). The students focus on a neighborhood settled on the valley border and surrounded by kitsch objects and kitsch spaces, which contains a closed community who lives in similar housing type serving similar profiles. They searches for a neighborhood that does not imitate, is at peace with nature, coexists with various experiences and diversity of actions, and can serve a heterogeneous society (See Fig. 3.32).

So, they critically ask ‘ what could happen if the neighborhood transforms by removing kitsch structures placed in green and by the innovative housing structures settled with the consideration of the topography of the valley, that serves for

---

<sup>26</sup> To see more visual productions, see Appendix 16.

a community that shares a sense of togetherness. They experiment on housing types by considering social, technical, ecological and architectural factors.

They respond to the existing with the valley left to the ecosystem and a complex housing focused on co-production and sharing. They visually express their speculative theory using different media and tools for many reasons such as materializing the experiments on housing types, expressing their innovative structure and voicing their criticisms.

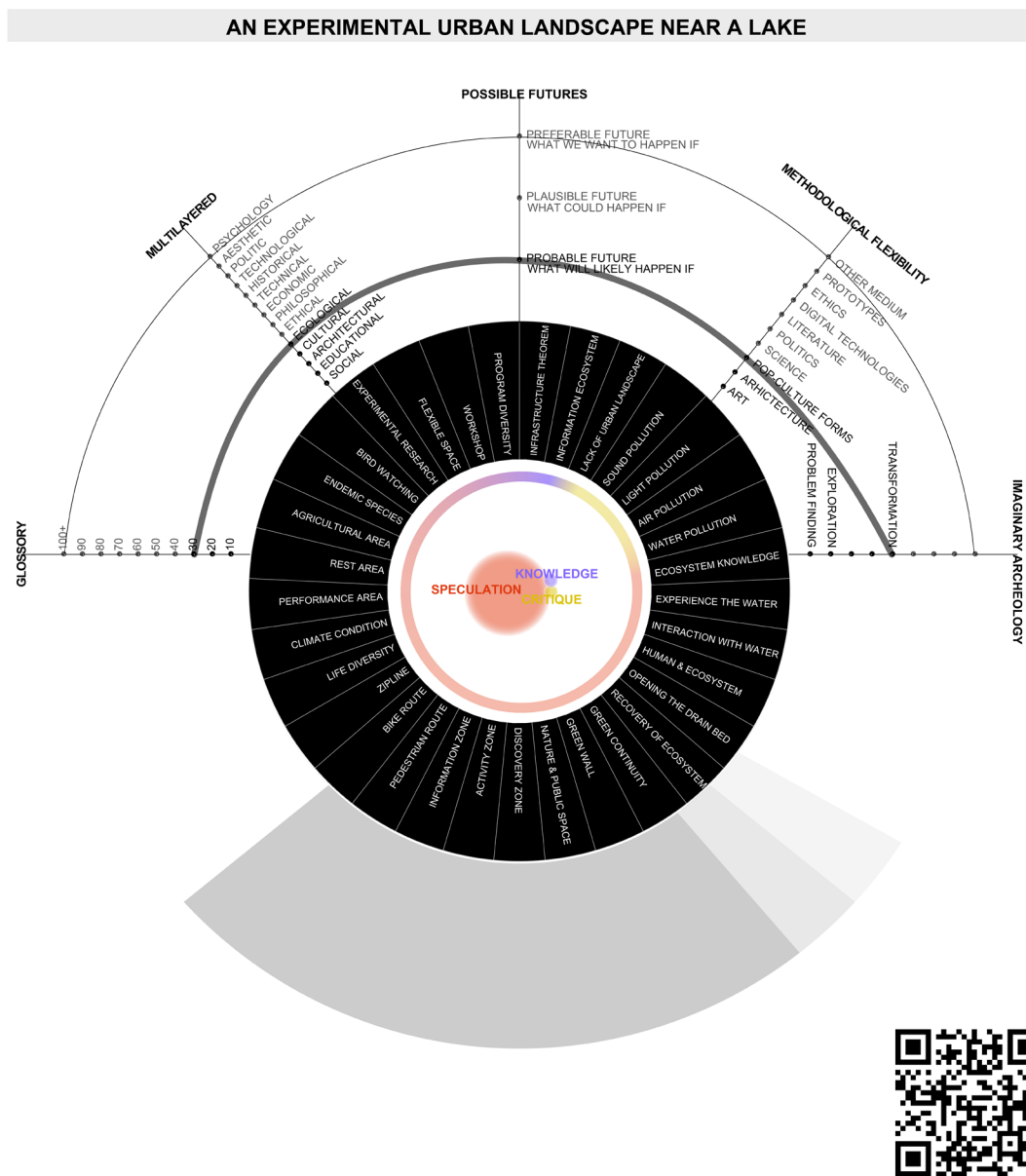


Figure 3.30 : THE WATER's visual graphic.



Figure 3.31: THE KITSCH<sup>27</sup> by Kerem Berkay Taş, Püren Bahçıvan, Sevim Pınar Yorulmaz.

#### *Case 16: LEARNING LANDSCAPE*

The proposal, LEARNING LANDSCAPE, critically discusses the blurred existence of educational places in the city, especially with the changing daily life practices (See Fig. 3.33). With an ecological approach, the intend is to connect and enhance education and training nodes and network, and also to bring the campus to the city with multimodal and technologically transformed streets. At this point, they set out to create a learning landscape which connects educational campus structures and increases urban interactions and connections. For that, they ask ‘what could happen if a learning landscape for formal and informal learning, which acts like an extended campus and has its own network cloud for sharing information, integrates with the city?’ (See Fig. 3.34).

So, their speculative theory is based on the potential of the urban landscape, which can respond to the climate crisis using energy conversion knowledge and green continuity with reduced concrete ground, and aims to bring the learning situation to every part of

---

<sup>27</sup> To see more visual productions, see Appendix 17.



the city with changing practices. They create digital urban furnitures and urban surfaces with learning layout with virtual reality.

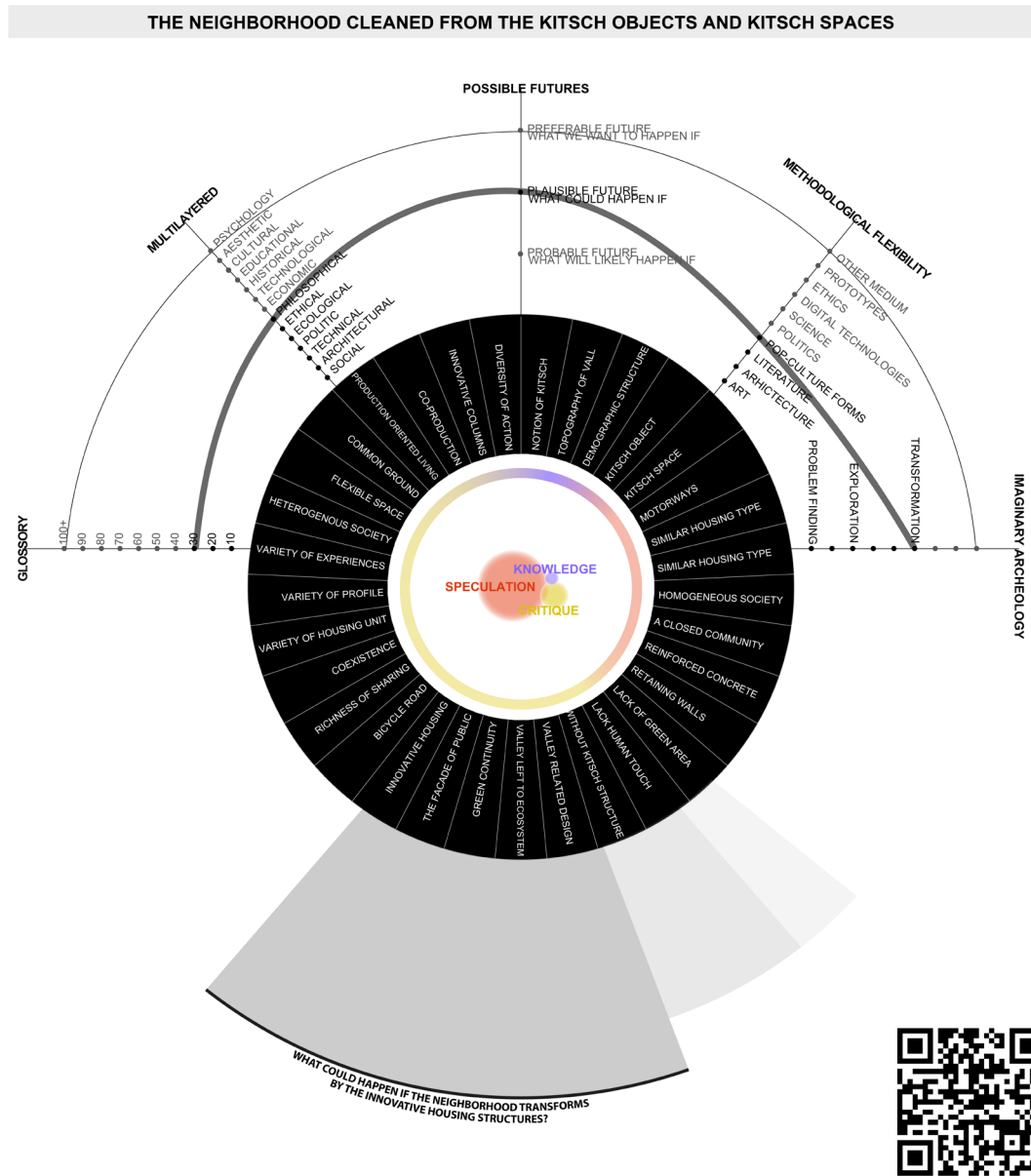


Figure 3.32 : THE KITSCH's visual graphic.

Also, the proposal aims to increase urban awareness on the coexistence of technology and ecology by proposing a structure focused on a technological infrastructure that produces its own energy with waste recycling, rainwater recovery and algae culture sprouting methods. Connecting their critical idea and visual aspects of their ideal, the students materialize their scenario and try to search for what the question of 'what if' represents.



Figure 3.33 : LEARNING LANDSCAPE<sup>28</sup> by Asude Aydın, Semaye Efe, Şengül Bulut.

#### *Case 17: THE LOCK*

The proposal, THE LOCK, critically points to the accessibility problem and unqualified green areas in a significant part of the city due to the urban development (See Fig. 3.35). Especially after pandemic, it observes the importance of the need of qualified open spaces integrated with green areas and accessibility to them. As conscious social actor, the student attempts to change the existing structure of urban layout with her speculative theory about turning green into an invasion instrument. So, she asks ‘what if an urban forest as the main spine of the city co-operates with the architectural structures integrated with topography?’ (See Fig. 3.36).

The proposal considers green area as spines and lands as organs, and attaches importance of coexistence of green areas and structures. It claims that the transformation of preferable future can be occur with this mutualistic relationship. For that purpose, she tries out a steel structure guiding the green and soil community nodes that has closed loop system. By the help of 3D plant and soilless agriculture technology, she plans a city dominated by the urban forest promising new forms of production and diversity of social areas. The effort on visualisization is to move her critical thought from just an idea to something that has real-world implications.

---

<sup>28</sup> To see more visual productions, see Appendix 18.



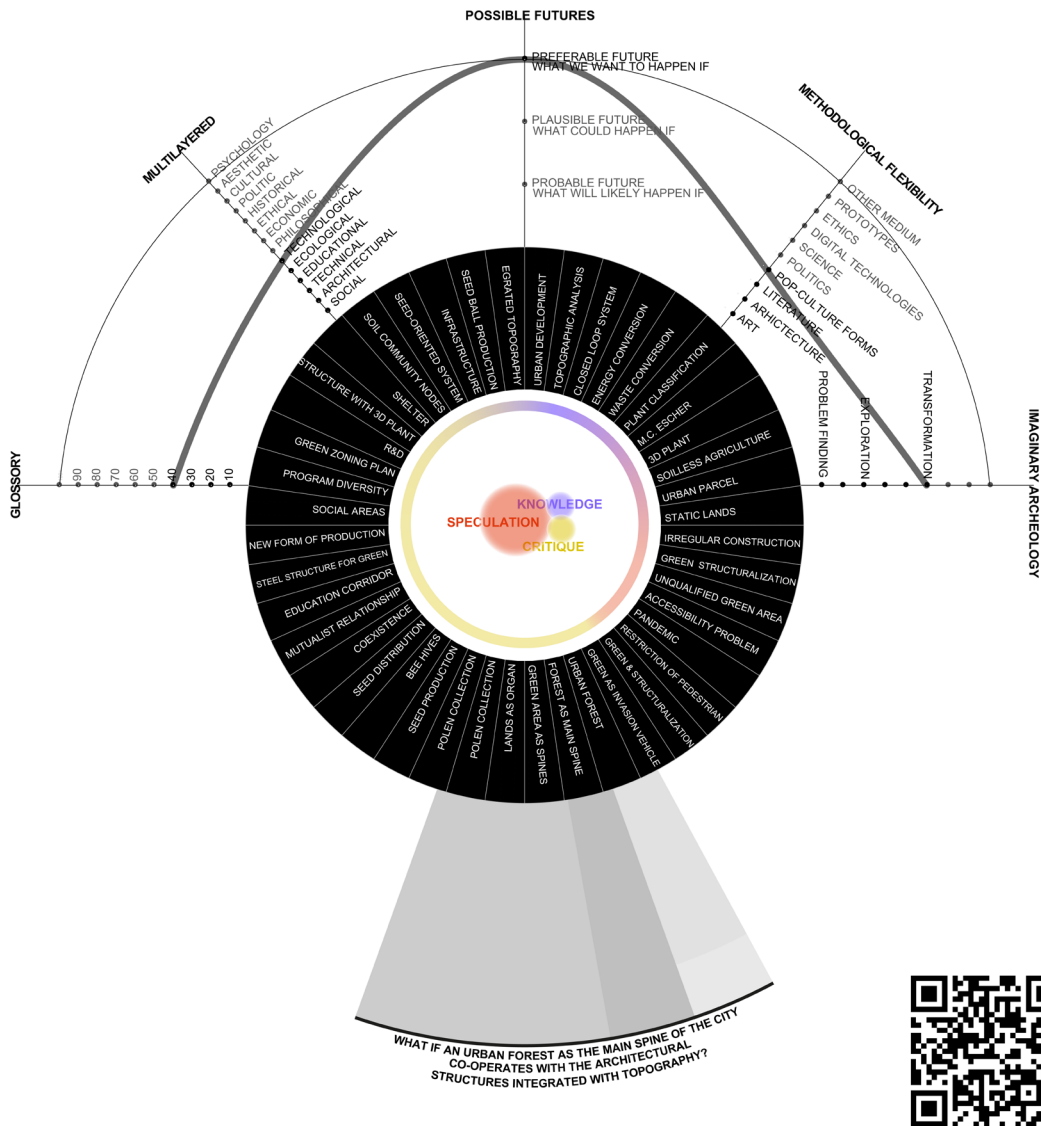


Figure 3.36 : THE LOCK's visual graphic.

### 3.4 The Discussion

The projects integrated with speculative architecture thinking, under the name of ‘Comprehending the Future of Ankara: Renewed Landscapes,’ are consequential in seeing the contributions of speculative architecture to the architectural learning environment (See Fig.3.37). In fact, the case studies are essential to understand the main principles and characteristics, which the theoretical framework intends to describe, rather than dealing with how speculative a proposal is, and to assert the claim that speculative architecture thinking can lead an approach which can push the boundaries and capabilities of the architectural learning environment.

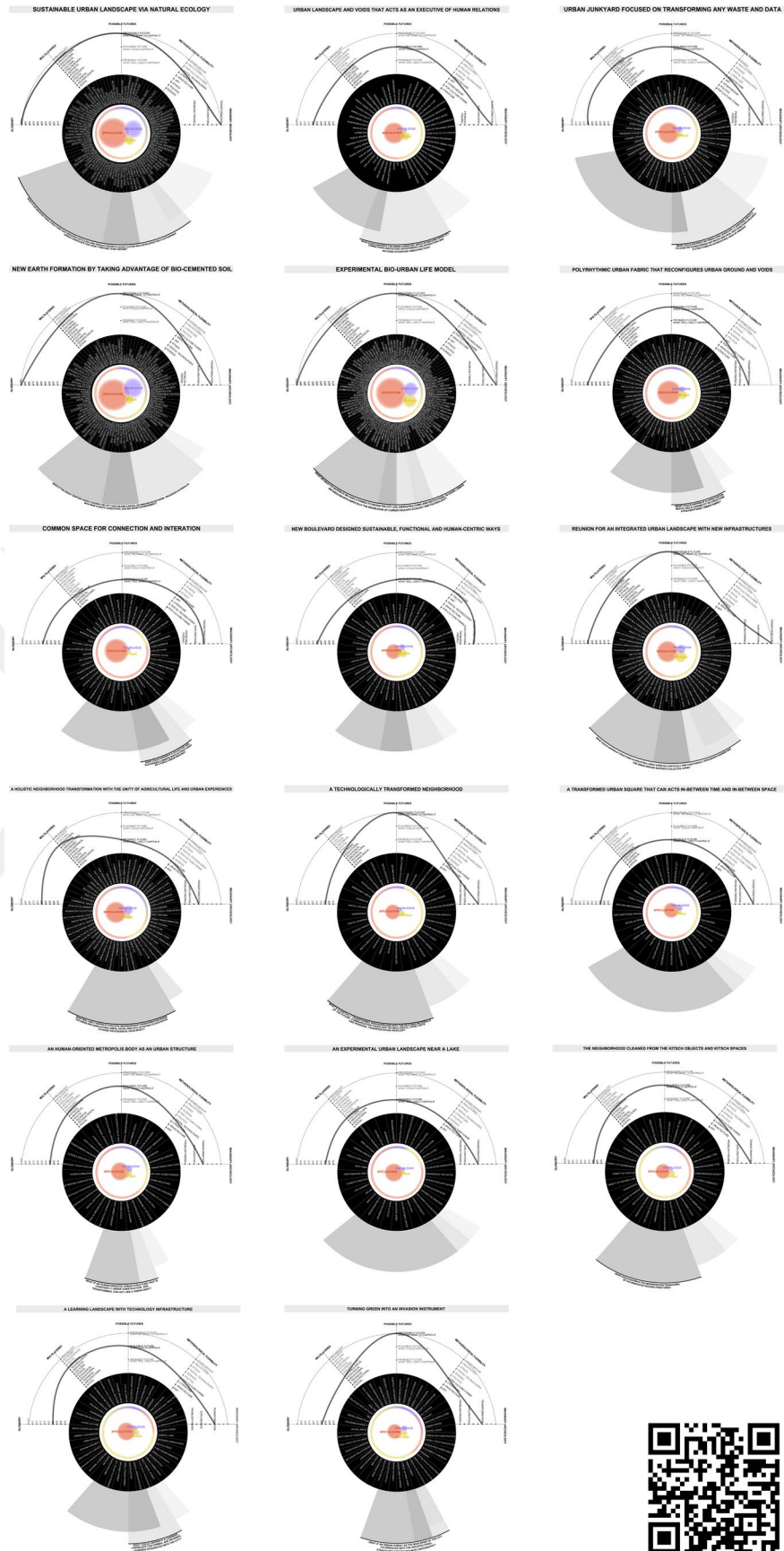


Figure 3.37 : The visual graphics all together prepared by author.

From this point of view, by reading together the speculative proposals looked through above with the help of the prepared tools, it is possible to carry out the discussion of what the potentials and effects of speculative architecture in the architectural learning environment are with its conceptual qualities, characteristics, methodologies, and the main principles.

Since the students are on an 'abstract journeys' where they search with doubt in the way of new opinions, ideals, and views and they are on their own universe of thought, it should be underlined that, they do not have a chance to transfer this abstract journey entirely to their speculative projects. In other words, they lose some ideas and productions on the way and materialize what they attach importance to most. Therefore, discussion can only be made over these. As mentioned before, since each student brings different projections with their own identity and their ways of actual and intellectual thinking and making may not meet on a single main road, the discussion does not seek for a pattern that expressing a solid chain of rules but for intention to demonstrate the consequential points that the variety of the students' approaches expose.

In the most general sense, speculative architecture thinking offers flexibility, diversity, and richness in terms of the position students take on through holding a point of view, of the discursive activity, which gives the design thought and idea an intellectual ground, and of the production process to inquiry through design. The author's detailed opinions and arguments, seeing each one as a potential for an architectural learning environment, are as follows, without the intention of prioritizing any of them.

- Since there is freedom in choosing their design and research topics, each student approaches the city from different perspectives and projections and brings diverse city problems to the fore or looks at the same problem through different critical lenses. As speculative architects, the students focus their discussion on whatever they want to raise awareness about. The transformation of society and the physical environment can be through interventions from minor issues to the largest. In fact, the problems of concern are not only about that city; they are universal issues that might be exceptionally broad, from significant matters to ordinary daily activities. So, the existing situations are addressed in various dimensions, from different viewpoints., such as cultural, social, economic, political, and ethical ones. Also, each speculative proposal

works as a prototype that presents the potential to be implemented in any part of the world that is concerned about a similar problem. **All of these enrich the content of the discussions in the studio environment.**

- After observing the problem, each student intends to open up spaces of debate and discussion on it, often starting with a what-if question to respond to the complex urban problems. The studio expects at this point to produce an alternative possibility, not an ultimate answer. For this reason, each proposal works as an alternative possibility in which asking critical questions and problem-finding guide the design processes of each student. **So, speculative architecture creates a space for debate and discussion on different critical thoughts, enabling students to be aware of their own thinking.**
- Since speculative activity does not seek the designed object that can be constructed and requires uncovering the design's role as a facilitator of thinking and discussing the vision of society and the world, the design process shapes according to this understanding in the studio. Some projects of the students can be built with today's technology and technics, while others are developed in a way that has never been seen or built before. They are also free to develop proposals from a simple project or idea to a more complex one. The point is not just the act of construction or producing a tangible end product but the act of speculation to think about the radical change. For this reason, the studio considers design as a medium to propel thinking and provoke action. Also, it declares that architectural education and its relation with the real world should not be composed of only the construction details in the plan and section. **So, the students have the possibility to offer alternatives that are necessary in today's world through a structure, with a speculative statement, or in a different way, without worrying about how to construct. This stimulates their creativity.**
- In connection with this, the design process becomes more important than the result product. In effect, the case studies are not about evaluating the end product as if it is speculative enough or not; but about understanding how speculative architectural thinking affects the design process. So, it can be said that each proposal attaches to the characteristics or values of speculative architecture thinking through the design process rather than saying the final product is a speculative architectural product. Students incorporate the main

principles of speculative architectural thought into their design processes, albeit varying degrees, in which their research, thoughts, and the possibilities they try to visualize comprise. **Speculative architecture creates an understanding that makes the process valuable in the learning environment.**

- The fact that this kind of perspective on the design process transforms the meaning of the design from end product into process product means that there are many outcomes and explorations, both actual and intellectual. It is because the students have the possibility to inquire, experiment, and express themselves in the process. Although each student makes this inquiry, experimentations, and expressions at different levels and rates, **it can be said that they carry out this kind of productive design process.**
- In parallel with that, the productive design process supports the interaction with other practices, fields, and disciplines. In other words, the students are able to ground their speculations and designs in certain practical and theoretical knowledge from other practices, fields, and disciplines. While one student may come up with ecological or sociological details to discuss the design problem, another may try alternative possibilities with more coverage of new technologies. While one student makes inquiries with the help of some technical and digital analysis, another can convey their thoughts with the techniques of art. Some proposals integrate the details from other practices, fields, and disciplines more in themselves; some include more architectural expressions. The process can completely differentiate one from another according to the student's research, design problem, and her/his own architectural and intellectual identity. **In the end, this contributes to the learning environment's interdisciplinary, multi-layered, and experimental structure.**
- The learning environment of the Diploma Studio which is integrated with speculative architecture thinking opens up a research attitude for the students, as well. Each student carries on his/her research throughout the design process because there is a need for both current and self-generated knowledge or meaning to understand the problem, create a powerful statement, to speculate. It can be said that the more comprehensive this research and, therefore, the knowledge produced and engaged with, the design can have the richer



intellectual ground, the more multidimensional, and the more productive the inquiry process. The variety and differences in the quantity and quantity of the advancement of the students' design proposals emerge accordingly. **Ultimately, providing students with this research medium develops their critical and creative thinking capacity and their productive energy for their future design practices and consolidates their intellectual and designer identities.**

- The focus of the students' production, that is, the quantitative emphasis of their visual expressions which they produce the problem-finding, exploration, or transformation while their inquiry thorough design process, differs. It is obvious that the students who attach equal importance to these three factors, that reflects both their criticism, research and the answer they give, and and who are in pursuit of the what-if questions they ask in this process, have richer graphics. Moreover, it can be said that those who put emphasis on to their critical thoughts and knowledge, together with the speculative ideas, overlap more with the understanding of speculative architecture, since it is based on a critical and creative act and an open field of inquiry. However, regardless of how much they make emphasis on these values, **the fact that the visual productions of each speculative project act with these values at least is a reflection of the success of speculative architecture in creating a space for designers to reflect upon the ideas and implications of design in and through practice.**
- The variety of curves in visual graphics shows what the speculative proposals attach more importance to. Those who act with more intellectual identity and richer glossary, use more diverse medium, techniques and tools, focus different possible futures, be more multi-layered by integrating with the knowledge from numerous fields and focus more on visual production are the reasons for this diversity. This approves that **speculative architecture is between the spaces between design, fiction and future, and each proposal decides where and how to stand by oneself.**
- Even if each research of the students has similar or different aspects, there is a clarity of the intention behind them, which is to spark the debate on a critical vision by focussing on a possible future. The proposals can be positioned to the different possible futures, which expand from the alternative present to the

preferable one, depending on the problem itself, the projected transformation, and the imagined developments of emerging technology. They come out with the points stretched in reality but do not sever all ties with existing reality, even if the focus is far future. Each student can decide and rethink the future, in which they construct the speculative scenario and discuss the possible future by using them as tools to understand the present better and redefine the relation to reality itself. **Thus, there is an environment for exploring various future potentials of the city and possibilities of emerging urban developments, through today's reality, without the necessity of delivering actionable plans toward those possibilities.**

- At this point, rather than creating that possible world itself, the students aim to hint at or conjure up the context they create alternatively. For this reason, they produce visual and discursive fragments of that context. The students can give more or less of these design fragments depending on their productivity, creativity, and intellectual identity, so their design idea and productions may be perceived as incomplete. In other words, the students try to materialize their alternative context to the extent that they can imagine, express and have the capability of using the available tools and techniques without trying to give an alternative future in all its details. **Speculative architecture thinking does not expect completely finalized proposals in the learning environment and supports the limitlessness and freedom to produce fragments.**
- It can be seen that each proposal holds narrative quality, to some degree, that helps to bring together these produced visual and discursive fragments in a critical and creative manner and serves as a glue to connect the factual and fictional aspects of the design. The students depict their speculative scenarios thanks to the mechanism of narrative and the techniques borrowed from film, literature, art, and more. **So, this characteristic of speculative architecture provides a powerful ground to cast as a provocateur and storyteller for an architect, which also contributes to being able to communicate with different audiences apart from the discipline of architecture. Also, it uncovers the architecture's capacity to create stories around things that were never intended to be built.**

These potentials and effects of speculative architecture in the architectural learning environment can be further discussed, interpreted, and multiplied in detail by a different point of view or through a different case study. From a broader framework, the most noticeable and primary ones it brings in the design approach can be evaluated over the three major inferences ensuing from the understanding and structure of the diploma studio, in which the theoretical framework of the thesis is also based upon. In fact, as the theoretical ground and the supporting studio examples reveal, speculative architecture in educational context structures and consolidate the student's sophisticated identity as the responsible architectural designer, the student's design thinking by compelling the boundaries and capabilities of architectural design, and the student's entire design process and its components. In a way, these three major aspects both constitute the structure of the architectural learning environment and also the potential and effects by shaping the architectural identity, critical design thinking, and the productive design process.

Thereby, it is not unextraordinary principally to observe diversified positions and perspectives, discourse and theories, visuals and visions in the architectural learning environment, which is engaged with speculative architecture thinking. It means that raising different architectural and intellectual identities, encouraging many different critical and creative thoughts, and producing multifold outputs are the most fundamental potentials and effects of speculative architectural thinking. This actually supports the idea that speculative architecture stimulates the interdisciplinary, multi-layered, and experimental research medium with its characteristics and principles and that the architectural learning environment is the most appropriate place where a design approach that emphasizes a critical attitude of an architectural designer, discursive richness of design, and multi-layered production through the design process can be adopted.



## **4. IN LIEU OF CONCLUSION**

### **4.1 Epilogue**

This thesis initiated with an attempt to reconsider ‘speculative architecture’ as a design approach that emerged in the first quarter of the 21st century towards the continuation of the evolvement in the discipline and the world. It is founded on this very fact, that comprehending speculative architecture as such, which would potentially respond to the problems of the current and coming decades and embrace the advancement of today's heterogenous environment, is essential to the discipline of architecture and its learning environment. Primarily, it was strategically crucial to underline the significant lack of any structural basis to interpret this design approach, especially in the architectural learning environment. In this wise, the intent was to decipher the understanding of speculative architecture in terms of its characteristics, explanations, and methodology, to offer a theoretical framework for its conceptualization in the discipline. It should be noted that this theoretical framework for structuring the understanding of speculative architecture should be considered as one of the many possible subjective constructions that could be restructured in many different manners.

Departing from this, the study addressed three essential factors considered as the scaffolding of the theoretical framework to form the contour of speculative architecture, based on the position of the architectural designer, the discursive form of the design idea, and the productions of the design process. As it could be grasped within the lines of this study, the underlying objective was to decipher who is speculative architect, how speculative architecture encourage a discursive activity, and what is speculative production process. To explain simply, speculative architect can be considered a social actor who takes a conscious position toward the prevailing situation with a critical attitude and intellectual identity. Speculative architecture encourages a discursive activity that embodies critical thinking, asking questions with conceptual richness, discussing, and speculating new modes of understanding of the urban environment by constructing a speculative theory. Speculative production process is about research for a critical vision by taking advantage of diverse and open-

ended strategies in terms of methods, tools, and techniques, as long as critically integrated with the design process.

As a matter of fact, the characteristic features and values of speculative architectural practice are inherent in the discipline of architecture and design itself, but they are hidden. For instance, the concepts of critical position, critical thinking, or critical inquiry are not new points to debate in the discipline but are always in the essence of architecture. However, the argument was that speculative architecture uncovers and highlights these qualities, as well as creates new understanding and values, proper to this century's conditions, problems, techniques, technologies, and languages. So, the main concern of this study was to understand the potential and effects it creates by pushing the boundaries and capabilities of architectural design, and to discover its contributions to the architectural learning environment.

Once the theoretical framework proposed through the notion of 'position', 'discourse', and 'production' is dwelled on, it was obvious that speculative architecture can be examined from many perspectives due to its multidisciplinary, experimental, and multi-layered characteristics. The primary importance of revealing such enriched and manifoldness of its conceptual outline was to create 'a tool' that works as an integrated and inclusive structure and incorporates this conceptuality of the theoretical framework that is proposed for reading and elaborating on speculative architecture. Thanks to this tool, in which the speculative values of the proposals can be evaluated, it has become possible to discuss the cognitive and practical outputs of Diploma Studio in terms of an architect's intellectual creativity, the multidimensionality of the design idea, and the design process as a systematic inquiry. In other words, it has become possible to evaluate the potential and effects of speculative architecture in an educational context within a conceptual plane.

As advocated by the thesis, the studio environment is the most suitable place for adopting speculative architectural practice, where there are no boundaries to think, act, and design. Eventually, it is clear that the students in the role of speculative architects, who have acted as identities who can critically read the urban and its related situations, the design studio environment with enriched research capability, which makes it possible to generate critical thoughts coalesced.

At this point, it is necessary to emphasize the value and the significance of the education model of TOBB-ETU and the structure of the learning environment of TOBB-ETU Architecture Department, which is weaving the five principal ribbons each other: Architectural Design Studio; Architectural Culture, History and Theories; Architectural Design, Presentation, and Research Methods and Techniques; Building Technologies; Elective courses. TOBB-ETU Undergraduate Program is a four-year academic program designed to complement the formal education with paid practical work experience directly related to students' academic major. So, it gives a process of integration between learning and professional practice. This cooperative education has particular importance in helping students to take on increasing levels of responsibility and to use their professional knowledge and classroom learning in an integrated ways. Together with that, the curriculum of TOBB ETU Architecture Department allow students to gain knowledge and develop their skills in many aspects while elaborating the design task, and it is designed in a flexible and dynamic structure that is suitable for change and updating, unlike its counterparts. For instance, within the scope of several integrated courses in the same period, the students have the chance for experiencing the physical and/or a virtual representation of their research, making consultations on the presentation techniques of their design exercises, or discussing on issues regarding building technologies and construction details and building physics.

So, before graduating, thus in the diploma studio, the expectation is to melt everything the students have learned in the same pot and to develop their own architectural identity. Since the students experience traditional architectural practice already via the actual professional environment in the coop-education program and via the other design studios, the Diploma Studio encourages a more critical and speculative design approach that allow the opportunity for knowledge construction from the idea level to the urban and architectural level. It can be said that the learning environment of the Diploma Studio intends to maximize the students' awareness on the relations between the city, architecture and the role of the architect, just before graduation. In this way, the students can act with their own architectural and intellectual identity they construct in this environment in their professional life; the ability to develop an attitude towards existing, the way they say something towards the city and its problems, and all the skills they can include in the production process. The boundaries of what to do in the professional field are more specific and clear. Together with that, it is uncertain and

not given how an architect would approach the design, what kind of intellectuality an architect would produce, and how an architect would look at the future. The Diploma Studio believes that it is essential for an architect to get these gains in the educational field. Therefore, it embraces critical and speculative design thinking, that leads inquiry through design by asking what-if questions in an urban scale and critical thinking with interdisciplinary ways, as oppose to conventional understanding of the Diploma projects which are more affirmative.

As stated throughout the thesis, speculative architecture thinking in Diploma Studio provides a research space to use and produce theoretical and/or factual knowledge, stimulate cognitive and practical skills, and apply knowledge and skills autonomously and with responsibility. Therefore, speculative architectural practice creates an opportunity to seize the chance and to take the responsibility to research and design in a critical position in the educational context, unlike the profession. It presents potential by making architecture a more open and exploratory field and has the power to reactivate dormant disciplinary attitudes in architectural education, by offering a critical and speculative approach that realizes itself with challenging visions, statements with intellectual profundity, enlightening visual expressions, and assertive perspectives. All these capabilities are gains that is valuable and can distinguish an architect from another in professional life.

It also needs to be emphasized that the act of speculation, which structure the design understanding of the Diploma Studio, can be considered as a point of contact, or an intersection, in the relationship between interrelated but separated concepts of architectural practice, architectural criticism and architectural education. In other words, the act of speculation in architecture provides significant critical, complex and progressive contribution to these three domains that have a feedback on each other constantly. It is because it allows to continually reconstructs thinking and making sphere of architecture and to stay relevant in today's heterogeneous environment, while contributing to improve architectural discourse, theory, and culture of architecture. So, the act of speculation serves as a means to critical, complex and progressive thinking on behalf of both architectural education, architectural practice and architectural criticism.

Of course, Diploma Studio is just an example of the implementation of the act of speculation in the educational context. It was an experiment with an undefined path



and unpredictable outcomes, which could have been applied in different ways as well. As more studies on it and experiment with visionary perspectives are carried out, as more defined concepts related to it are comprehended in various projections and under theoretical bases, and as more integrated with today's progressive values and qualities, speculative architectural practice could make stronger and more provocative impacts, and stimulate more diverse and forceful discussions for the architectural learning environment.

To conclude, it is explicit that giving chance to original and imaginative architectures that emerge as the continuation of an extremely developing world in terms of technology, culture, and aesthetics makes an immeasurable difference. It is significant for both architects in the profession and the academic, and most especially the students to embrace these kinds of new understanding, in order to design future cities in a visionary way by being integrated with the fields such as economy, ecology, ethic, and technology as creatively and critically as possible. It is, by all means, possible to multiply the example of these kinds of guiding architectural conceptions. By means of encouraging a critical approach and an open-ended field of inquiry and constituting a driving force to think about the city and its problems, speculative architecture is just a guiding light to stay relevant in today's context. To provide opportunities for such visionary design approaches, especially in the architectural learning environment, acknowledging that the architectural learning environment needs to renew its responsibilities and goals to respond to the changing conditions, is incredibly stimulating and inspiring



## REFERENCES

- Allen, S.** (2000). *Practice: Architecture, Technique and Representation*. New York: Routledge.
- Aristotle.** (1999). *Nicomachean Ethics*. (T. Irwin, Ed., & T. Irwin, Trans.) Indianapolis: Hackett Publishing.
- Apollonio, U.** (Ed.). (1973). *Futurist Manifestos*. London: Thames and Hudson.
- Auger, J.** (2013). Speculative Design: Crafting the Speculation. *Digital Creativity*, 24(1), 11-35
- Auger, J., Hanna, J., & Mitrović I.** (2021). Future Paths. In I. Mitrović, J. Auger, J. Hanna, & I. Helgason (Eds.), *Beyond Speculative Design: Past–Present–Future* (pp. 202-211). Split: Speculativeedu; Arts Academy, University of Split .
- Auger, J., Hanna, J., & Helgason I.** (2021). An Overview of Speculative Design Practice. In I. Mitrović, J. Auger, J. Hanna, & I. Helgason (Eds.), *Beyond Speculative Design: Past–Present–Future* (pp. 68-93). Split: Speculativeedu; Arts Academy, University of Split.
- Bancı S., & Çağlar, N.** (2021). Understanding the Future of Ankara in Architectural Design Studios. *DOSYA 49: Mimari Tasarım Stüdyolarında Ankara'nın Geleceğini Kavramak*, 49, 8.
- Baird, G.** (1969). La Dimension Amoureuse In Architecture. In K. Michael Hays (Ed.). *Architecture Theory Since 1968* (pp. 36-55). Cambridge, London: The MIT Press.
- Bardzell, S., Bardzell, J., Forlizzi, J., Zimmerman, J., and Antanitis, J.** (2012). Critical Design and Critical Theory: The Challenge of Designing for Provocation. In *DIS'2012: Proceedings of Designing Interactive Systems 2012*, 288-297.
- Bardzell, J., & Bardzell, S.** (2013). What is “Critical” about Critical Design?. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, 3297–3306.
- Berger, J.** (2008). *Ways of Seeing*. London: Penguin Book.
- Bletter, R. H.** (1981). The Interpretation of the Glass Dream-Expressionist Architecture and the History of the Crystal Metaphor. *The Journal of the Society of Architectural Historians*, 40(1), 20-43.
- Bowen, S.** (2010). Critical Theory and Participatory Design. In *Proceedings of ACM Conference on Human Factors in Computing Systems CHI2010*, 10-15.
- Bruno, T.** (1919) *Alpine Architektur*. Hagen: Folkwang-Verl.

- Camere, S., Schifferstein, H. N., & Bordegoni, M.** (2018). From Abstract to Tangible: Supporting the Materialization of Experiential Visions with the Experience Map. *International Journal of Design*, 12(2), 51-73.
- Collins, G. R.** (1979). Visionary Drawings of Architecture and Planning: 20<sup>th</sup> Century through the 1960s. *Art Journal*, 38(4), 244-256.
- Colomina, B.** (2005). Architectureproduction1. In K. Rattenbury (Ed.), *This Is Not Architecture: Media constructions* (pp. 207-221). Split: Speculativeedu; Arts Academy, University of Split. New York: Routledge.
- Crosbie, M.** (2007). Assessing Architectural Education's 'Crown Jewel. *International Journal of Architectural Research, Archnet-IJAR*, 1(2), 106-108.
- Csikszentmihalyi, M.** (1997). *Flow and the Psychology of Discovery and Invention*. New York: HarperPerennial.
- Çağlar, N., & Curulli I. R.** (2020). Introduction. In N. Çağlar, I. G. Curulli, I. R. Sipahioğlu, & L. Mavromatidis (Eds.), *Thresholds in Architectural Education* (pp. xiii-xxii). Wiley-ISTE.
- Çağlar, N., Öztoprak, Z., & Sipahioğlu, I. R.** (2021). Mimarlık Eğitimi ve Ankara için Gelecek Spekülasyonları. *DOSYA 49: Mimari Tasarım Stüdyolarında Ankara'nın Geleceğini Kavramak*, 49, 13-27.
- Derrida, J.** (1998). "Point de folie—Maintenant l'architecture". In K. Michael Hays (Ed.), *Architecture Theory Since 1968* (566-581). Cambridge, London: The MIT Press, pp. 566-581.
- DiSalvo, C., and Lukens. J.** (2009). Towards a Critical Technological Fluency: the Confluence of Speculative Design and Community Technology Programs. In *Proceedings of the Digital and Arts and Culture Conference*, 2009, 1-5.
- DiSalvo, C.** (2012). FCJ-142 Spectacles and Tropes: Speculative Design and Contemporary Food Cultures. *Fibreculture Journal*, (20), 109-122.
- Dunne, A.** (1997). *Hertzian tales: An investigation into the critical and aesthetic potential of the electronic product as a post-optimal object*. Unpublished Doctoral Dissertation, Royal College of Art, London, UK.
- Dunne, A. & Raby, F.** (2001) *Design Noir: The Secret Life of Electronic Objects*. Basel: Birkhäuser.
- Dunne, A.** (2006). *Hertzian Tales: Electronic Products, Aesthetic Experience, and Critical Design* (2006 edition red). Cambridge: The MIT Press.
- Dunne, A. and Raby, F.** (2013). *Speculative Everything - Design, Fiction and Social Dreaming*. USA: The MIT Press.
- Edwards, P.** (1972). *The Encyclopaedia of Philosophy*. U.S.: Macmillian Publishing Co., Inc. and The Free Press.
- Enrique, E., Božanić, S., & Šuran O.** (2021). Methods, Approaches and Tools: Ambiguity, Tensions and Scopes. In I. Mitrović, J. Auger, J. Hanna, & I. Helgason (Eds.), *Beyond Speculative Design: Past–Present–Future*

(pp. 94-165). Split: Speculativeedu; Arts Academy, University of Split

- Enrique, E., Sara B., Oleg Š.** (2021). Future Paths. In I. Mitrović, J. Auger, J. Hanna, & I. Helgason (Eds.), *Beyond Speculative Design: Past–Present–Future* (pp. 202-211). Split: Speculativeedu; Arts Academy, University of Split.
- Farrar, M. E.** (2006). Foucault, Michel. In Ritzer, G. (Ed.), *The Blackwell Encyclopedia of Sociology (Vol. 1479)*, (pp. 1774-1778). New York: Blackwell Publishing.
- Fisher, T.** (1994). Can This Profession Be Saved+ Architects Face Increasing Fee-competition, Declining Power and a Shrinking Pool of Clients. *Progressive Architecture*, 75(2), 44-49.
- Foucault, M.** (1972). *The Archaeology of Knowledge*. London: Tavistock.
- Friedman, Y.** (2001). In the Air. Interview with Yona Friedman. In Martin van Schaik and Otakar Macel (Eds.). *Exit Utopia. Architectural Provocations 1956-76* (pp. 30-35). Munich, Berlin, London, New York: Prestel Verlag.
- Galloway, A., & Caudwell, C.** (2018). Speculative Design as Research Method: From Answers to Questions and “Staying with the Trouble”. In *Undesign* (pp. 85-96). New York, NY: Routledge.
- Georgiev, G.V., & Taura, T.** (2015). Using Idea Materialization to Enhance Design Creativity. In *Proceedings of the 20th International Conference on Engineering Design (ICED15)*, 8, 349-358.
- Goldschmidt, G.** (1994). On Visual Design Thinking: the Vis Kids of Architecture. *Design studies*, 15(2), 158-174.
- Golub, M.** (2016). “What if?” – Two or Three Notes on Speculation. In Mitrović, I., & Šuran, O. (Eds.), *Speculative-Post-Design Practice or New Utopia* (pp. 28-32). Ministry of Culture of the Republic of Croatia & Croatian Designers Association.
- Grand, S., & Wiedmer, M.** (2010). Design fiction: a method toolbox for design research in a complex world. In *Proceedings of the DRS 2010 conference: Design and Complexity*, 1-16.
- Grosz, E.** (2001). *Architecture from the Outside: Essays on Virtual and Real Space*. Cambridge, MA: MIT Press.
- Hays, K. M.** (1995). *Modernism and Posthumanist Subject*. Massachusetts: MIT Press.
- Hays, K. M.** (Ed.) (1998). Introduction. In *Architecture Theory since 1968* (pp. x-xv). Mit press.
- Hays, K. M.** (2010). *Architecture's Desire: Reading the Late Avant-garde*. Massachusetts: MIT Press.
- Holl, S.** (2000). *Parallax*. Princeton Architectural Press.
- Holl, S.** (2007). *Architecture spoken*. US: Rizzoli International Publications Inc.

- Ingold, T.** (2013). *Making: Anthropology, Archaeology, Art and Architecture*. New York, NY: Routledge.
- Lukens, J., & DiSalvo, C.** (2012). Speculative Design and Technological Fluency. *International Journal of Learning and Media*, 3(4), 23-40.
- Malpass, M.** (2013). Between Wit and Reason: Defining Associative, Speculative, and Critical Design in Practice. *Design and Culture*, 5(3), 333-356.
- Malpass, M.** (2015). Criticism and Function in Critical Design Practice. *Design Issues*, 31(2), 59-71.
- Manauagh, G.** (2009). *The BLDGBLOG Book*. San Francisco CA: Chronicle Books.
- Mathews, S.** (2006). The Fun Palace as Virtual Architecture. Cedric Price and the Practices of Indeterminacy. *The Journal of Architectural Education*, 59(3), 39-48.
- Mazé, R., & Redström, J.** (2009). Difficult Forms: Critical Practices of Design and Research. In *Research Design Journal*, 1, 28-39.
- Mazé, R.** (2009). Critical of What? / Kritiska mot vad?'. In M. Ericson, et al. (Eds) *Iaspis Forum on Design and Critical Practice – The reader* (pp. 378-398). Berlin: Sternberg Press / Iaspis.
- McHoul, A., & Grace, W.** (1997). *A Foucault primer: Discourse, power, and the subject*. New York: NYU Press.
- Miessen, M.** (2007). Secret practices: Markus Miessen in Conversation with Metahaven, Vinca Kruk and Daniël Van Der Velden. In Z. Kyes and M. Owens (Eds.) *Forms of inquiry: The architecture of critical graphic design* (pp. 160-165). London: Architectural Association Publications.
- Mitrović, I.** (2015). An introduction to speculative design practice. In: Mitrović, I., Golub, M., Šuran, O. (eds.) *An Introduction to Speculative Design - Eutropia, a Case Study Practice* (pp. 8–23). Split: Croatian Designers Association Department for Visual Communications Design, Arts Academy, University of Split.
- Mitrović, I., & Šuran, O.** (2016). *Speculative-Post-Design Practice or New Utopia*. Ministry of Culture of the Republic of Croatia & Croatian Designers Association.
- Mitrović, I., Auger, J., Hanna, J., & Helgason, I.** (Eds.) (2021). *Beyond Speculative Design: Past – Present – Future*. Split, Croatia: SpeculativeEdu; Arts Academy, University of Split.
- Nesbitt, L., Brodsky, A., & Utkin, I.** (1991). *Brodsky & Utkin*. New York: Princeton Architectural Press.
- Nesbitt, L., Brodsky, A., & Utkin, I.** (2003). *Brodsky & Utkin: The Complete Works*. New York: Princeton Architectural Press.
- Oatley, K.** (2011). *Such Stuff as Dreams: The Psychology of Fiction*. Chichester, UK: Wiley-Blackwell.
- Öztoprak, Z., & Çağlar, N.** (2020). Designerly Ways of Understanding Research Capabilities of Architectural Design and Studio. In N. Çağlar, I. G.

- Curulli, I. R. Sipahioğlu, & L. Mavromatidis (Eds.), *Thresholds in Architectural Education* (pp. 129-144). Wiley-ISTE.
- Ramji, H.** (2006). Difference. In Ritzer, G. (Ed.), *The Blackwell Encyclopedia of Sociology (Vol. 1479)*, (pp. 1153-1155). New York: Blackwell Publishing.
- Ritzer, G.** (Ed.) (2007). *The Blackwell Encyclopedia of Sociology (Vol. 1479)*. New York: Blackwell Publishing.
- Scolari, M.** (1973). The New Architecture and the Avant-Garde. In K. Michael Hays (Ed.). *Architectural Theory Since 1968* (pp. 124-145). Cambridge, London: The MIT Press.
- Silvetti, J.** (1977). The Beauty of Shadows. In K. Michael Hays (Ed.). 1998. *Architectural Theory Since 1968* (pp. 262-283). Cambridge, London: The MIT Press,
- Solovyova, I., Nanda, U., & Downing, F.** (2009). Searching for a New Paradigm in Architectural Education. *Leadership in Architectural Research*, (pp. 345-352). Lulu Publications.
- St.Pierre, E.A.** (2007). Writing as a Method. In Ritzer, G. (Ed.), *The Blackwell Encyclopedia of Sociology (Vol. 1479)*, (pp. 5304-5306). New York: Blackwell Publishing.
- Stewart, D. B.** (2002). *The Making of a Modern Japanese Architecture: From the Founders to Shinohara and Isozaki*. Tokyo: Kodansha International.
- Stewart, R. A.** (2003). Practice vs Praxis: Modelling Practitioner-Based Research. In *Proceedings of the 2002 InSEA World Congress: International Conversations Through Art (pp. 1-8)*. New York, USA.
- Smyth, M., Auger, J., & Helgason, I.**, (2021). Echoes of Futures Past. In I. Mitrović, J. Auger, J. Hanna, & I. Helgason (Eds.), *Beyond Speculative Design: Past–Present–Future* (pp. 24-52). Split: Speculativeedu; Arts Academy, University of Split.
- Tafari, M.** (1974). L'Architecture dans le Boudoir: The Language of Criticism and the Criticism of Language. In K. Michael Hays (Ed.). *Architectural Theory Since 1968* (pp. 146-173). Cambridge, London: The MIT Press.
- Teyssot, G.** (1980). Heterotopias and the History of Spaces. In K. Michael Hays (Ed.) *Architectural Theory Since 1968* (pp. 296-.305). Cambridge, London: The MIT Press.
- Thomsen, M. R., & Tamke, M.** (2009). Narratives of Making: Thinking Practice Led Research in Architecture. In *Proceedings of the Communicating (by) Design*, 343-351.
- Uncertain Commons.** (2013). *Speculate This!*. New York, USA: Duke University Press.
- Ward, M.** (2021). A Practice of Hope, A Method of Action. In I. Mitrović, J. Auger, J. Hanna, & I. Helgason (Eds.), *Beyond Speculative Design: Past–Present–Future* (pp. 166-201). Split: Speculativeedu; Arts Academy, University of Split.

- Woods, L.** (1992). *Anarchitecture: Architecture is a Political Act*, (Architectural Monographs 22). New York: Academy Editions, St. Martins Press.
- Young, L.** (Ed.) (2014). *Brave New Now Book*.. Lisbon Architecture Triennale.
- Young, L.** (2021). Planet City. *AIS-Architecture Image Studies*, 2(1), 30-43.
- Zizek, S.** (2006). *The Parallax View*. Boston, MA: MIT Press.
- Url-1** <https://www.materiart.org/glossary-dptiyh-i>
- Url-2** <https://systemic-design.net/wp-content/uploads/2017/12/RSD6-dlaRosaKohlerRuecker-1.pdf>
- Url-3** <https://www.nextnature.net/story/2015/interview-liam-young>
- Url-4** <http://speculative.hr/en/james-auger/>
- Url-5** <https://speculativeedu.eu/interview-james-auger>
- Url-6** <https://www.core77.com/posts/12232/the-4-fields-of-industrial-design-not-furniture-trans-consumer-electronics-toys-by-bruce-m-tharp-and-stephanie-m-tharp-12232>
- Url-7** <https://www.core77.com/posts/41991/What-is-Discursive-Design>
- Url-8** <https://speculative.hr/en/ramia-maze/>
- Url-9** <https://openjournal.com.au/dialogue-liam-young/>
- Url-10** <https://speculativeedu.eu/interview-maja-grakalic/>
- Url-11** <https://lebbeuswoods.wordpress.com/2007/10/20/taking-a-position/>
- Url-12** <https://www.wundermanthompson.com/insight/liam-young-speculative-architect-and-director>
- Url-13** <https://www.oxfordlearnersdictionaries.com/definition/english/speculation>
- Url-14** <https://dictionary.cambridge.org/dictionary/english/speculation>
- Url-15** <https://speculativeedu.eu/interview-automato-farm>
- Url-16** <https://speculativeedu.eu/interview-circum-flex-studio/>
- Url-17** <https://lebbeuswoods.wordpress.com/2011/12/15/war-and-architecture-three-principles/>
- Url-18** <https://www.cca.qc.ca/en/search/details/collection/object/17580>
- Url-19** <http://www.dunneandraby.co.uk/content/bydandr/465/0>
- Url-20** <https://lebbeuswoods.wordpress.com/2009/03/10/architecture/>
- Url-21** <https://lebbeuswoods.wordpress.com/2007/11/13/what-is-architecture/>
- Url-22** <https://www.moma.org/collection/works/104695>
- Url-23** <https://speculativeedu.eu/interview-paolo-cardini/>
- Url-24** <https://interakcije.net/en/2018/08/27/western-melancholy-how-to-imagine-different-futures-in-the-real-world/>
- Url-25** <https://speculativeedu.eu/interview-matt-malpass/>
- Url-26** <https://www.archigram.net/portfolio.html>



- Url-27** <https://speculativeedu.eu/interview-jimmy-loizeau/>
- Url-28** <https://speculativeedu.eu/interview-matt-ward/>
- Url-29** <https://speculativeedu.eu/interview-deepa-butoliya/>
- Url-30** <https://graphcommons.com/graphs/df5af782-3433-426c-9ae7-d63f296a14b1>





## **APPENDICES**

Appendix 1: Timeline of Visionary Approaches in the 20<sup>th</sup> Century by the author.

Appendix 2: The Outline of Speculative Architecture prepared by author in GRAPHCOMMON environment.

Appendix 3: A Series of Visual Fragments Belonging to the Case 1, UPCYCLER.

Appendix 4: A Series of Visual Fragments Belonging to the Case 2, POPS ANKARA.

Appendix 5: A Series of Visual Fragments Belonging to the Case 3, JUNKYARD.

Appendix 6: A Series of Visual Fragments Belonging to the Case 4, EARTH-DECONSTRUCTION.

Appendix 7: A Series of Visual Fragments Belonging to the Case 5, BIOTIC URBAN NETWORK.

Appendix 8: A Series of Visual Fragments Belonging to the Case 6, NEXUS.

Appendix 9: A Series of Visual Fragments Belonging to the Case 7, COMMON SPACE.

Appendix 10: A Series of Visual Fragments Belonging to the Case 8, BOULEVARD XYZ.

Appendix 11: A Series of Visual Fragments Belonging to the Case 9, THE REUNION.

Appendix 12: A Series of Visual Fragments Belonging to the Case 10, OIKOS.

Appendix 13: A Series of Visual Fragments Belonging to the Case 11, SEPERATE.

Appendix 14: A Series of Visual Fragments Belonging to the Case 12, BETWEENNESS.

Appendix 15: A Series of Visual Fragments Belonging to the Case 13, METROPOLIS BODY.

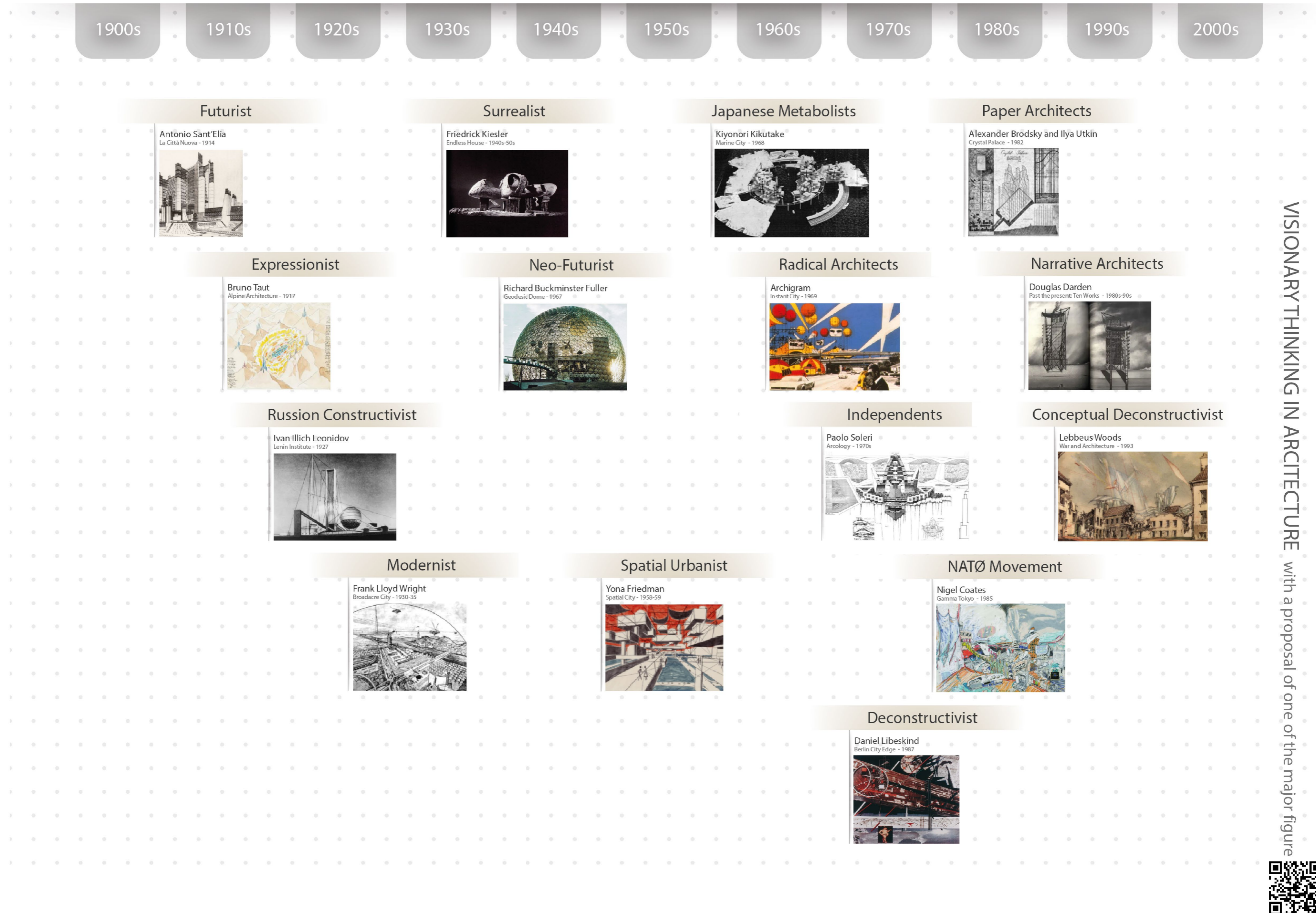
Appendix 16: A Series of Visual Fragments Belonging to the Case 14, THE WATER.

Appendix 17: A Series of Visual Fragments Belonging to the Case 15, KITSCH.

Appendix 18: A Series of Visual Fragments Belonging to the Case 16, LEARNING LANDSCAPE.

Appendix 19: A Series of Visual Fragments Belonging to the Case 17, THE LOCK.





VISIONARY THINKING IN ARCHITECTURE with a proposal of one of the major figure



Figure Appendix 1: Timeline of Visionary Approaches in the 20th Century by the author.

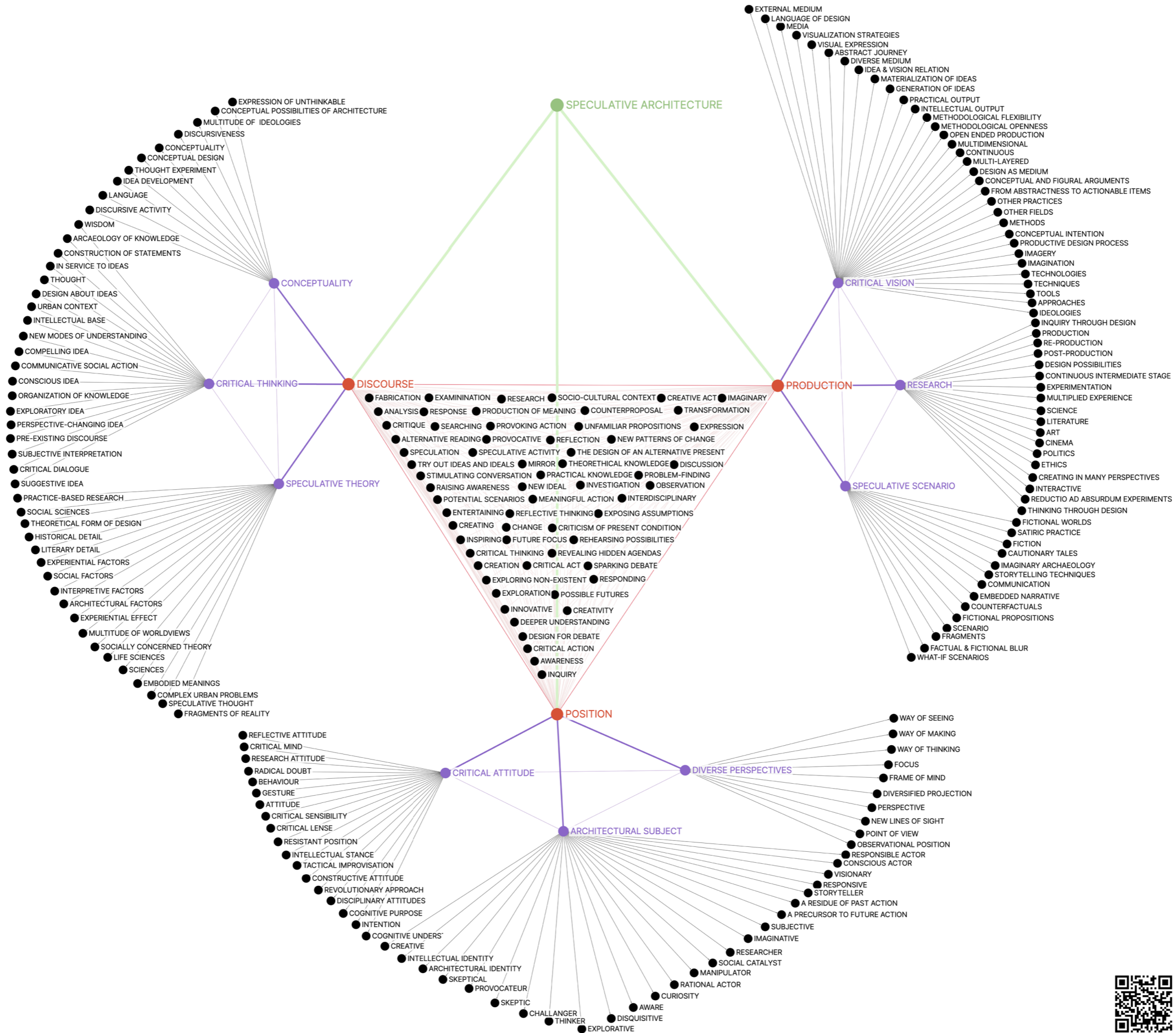


Figure Appendix 2: The Outline of Speculative Architecture prepared by author in GRAPHCOMMON environment.

APPENDIX 3

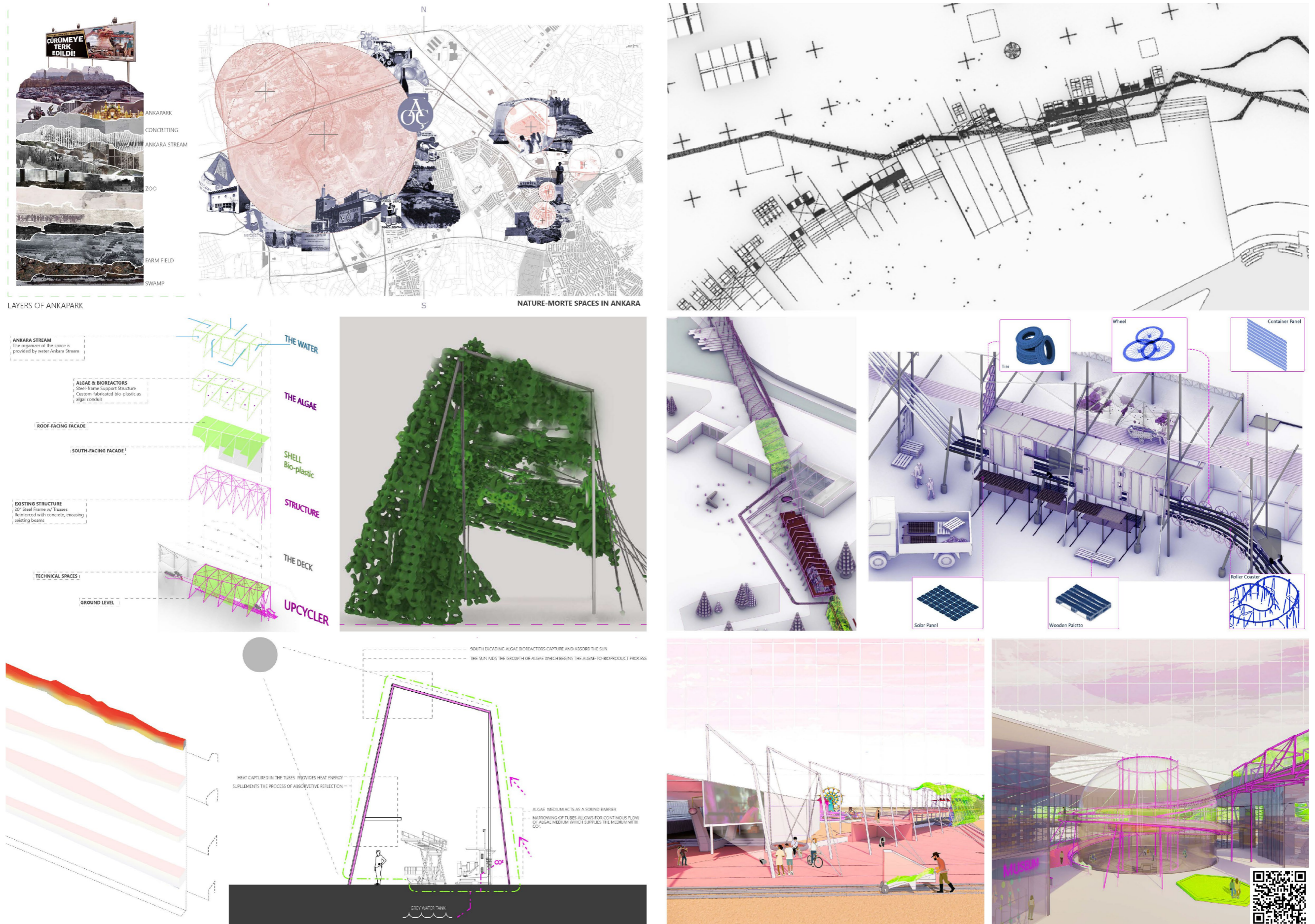


Figure Appendix 3: A Series of Visual Fragments Belonging to the Case 1, UPCYCLER, by Beyza Ayaz, İrem Tümay, Yasemin Engin.

APPENDIX 4

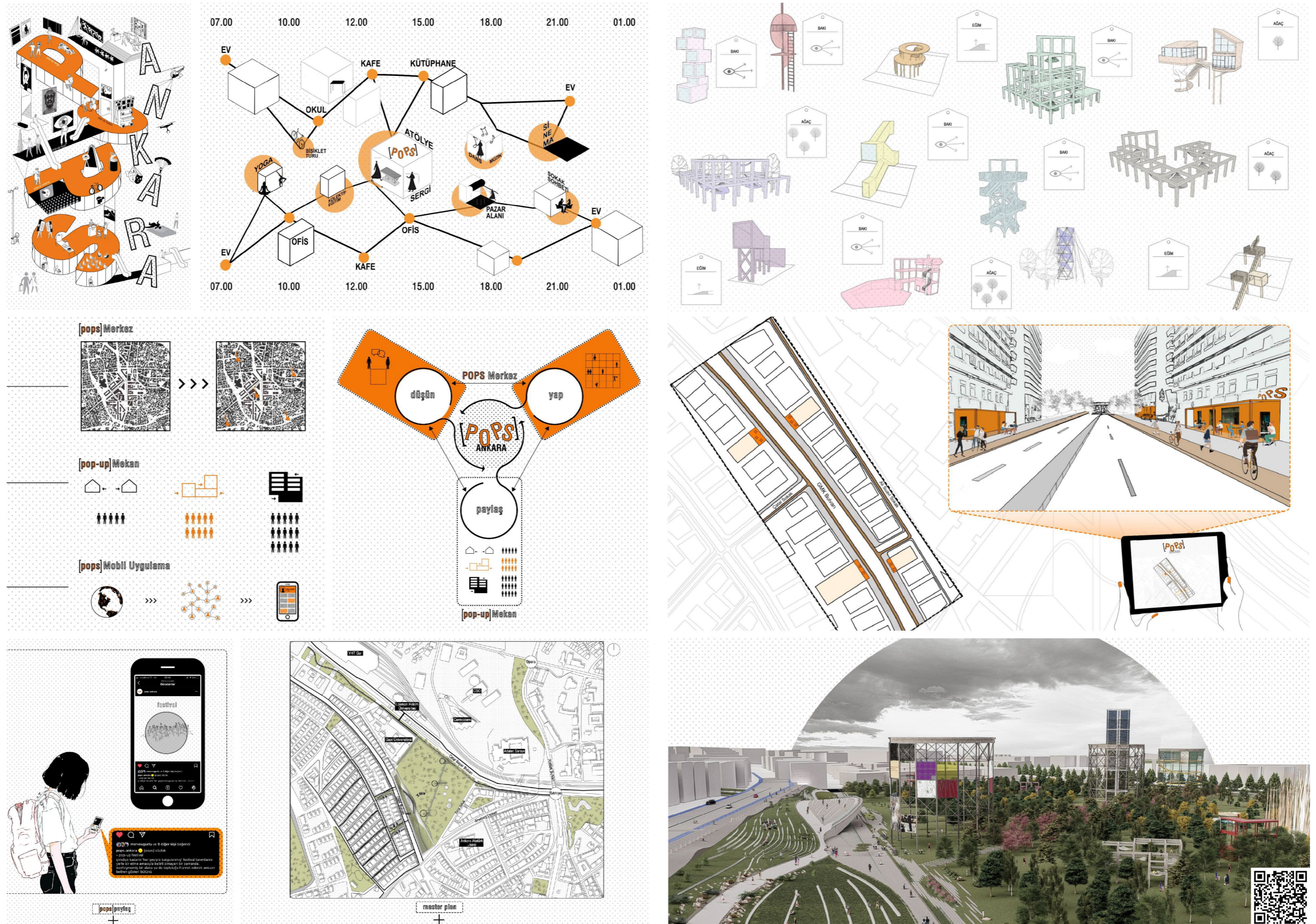


Figure Appendix 4: A Series of Visual Fragments Belonging to the Case 2, POPS ANKARA, by Büşra Bal, Emre Cansever, Ecem Bozbey, Merve Uğurlu.



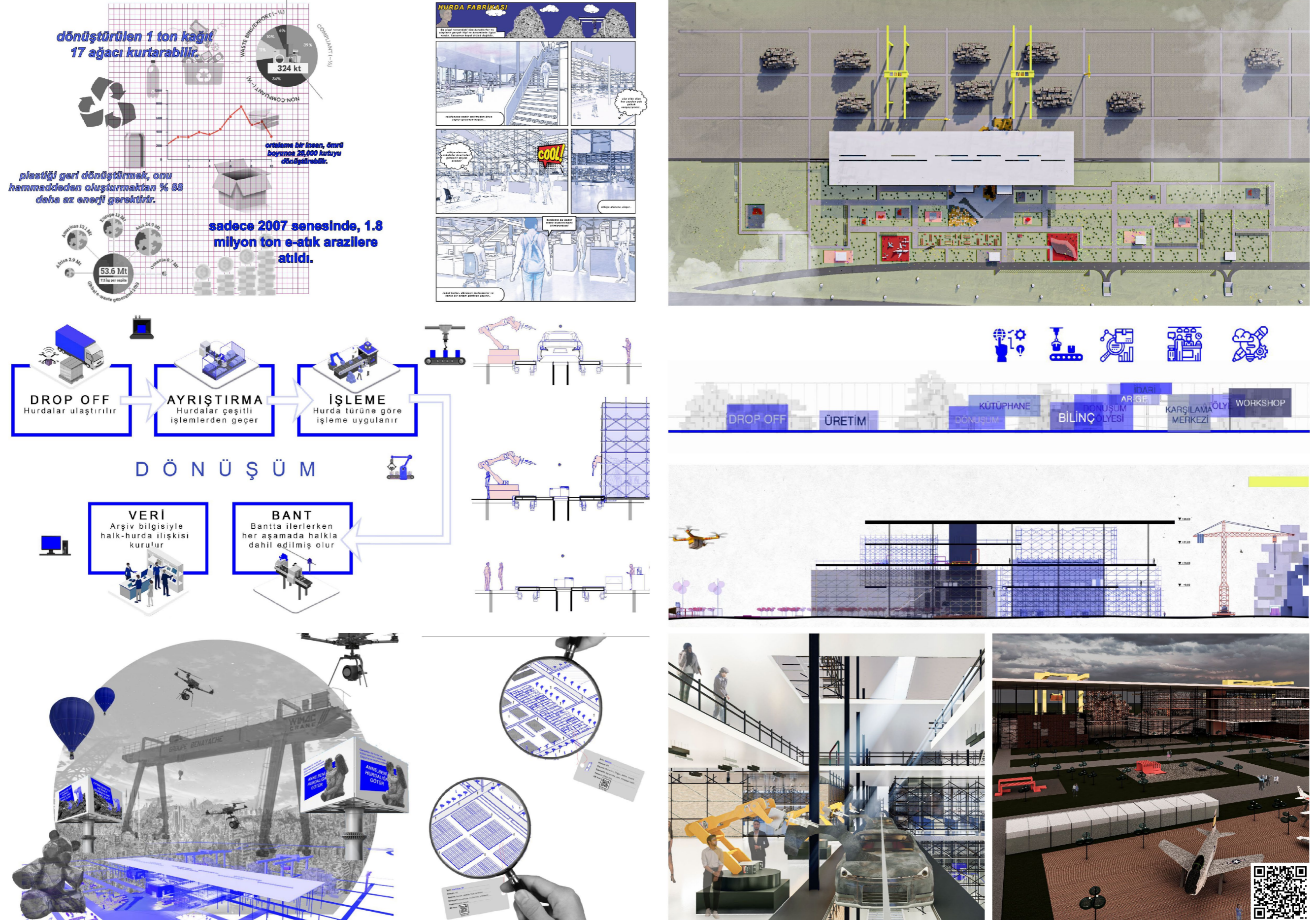


Figure Appendix 5: A Series of Visual Fragments Belonging to the Case 3, JUNKYARD, by Fatih İbiş, Pelin Güç, Pelin Yalçın.

APPENDIX 6

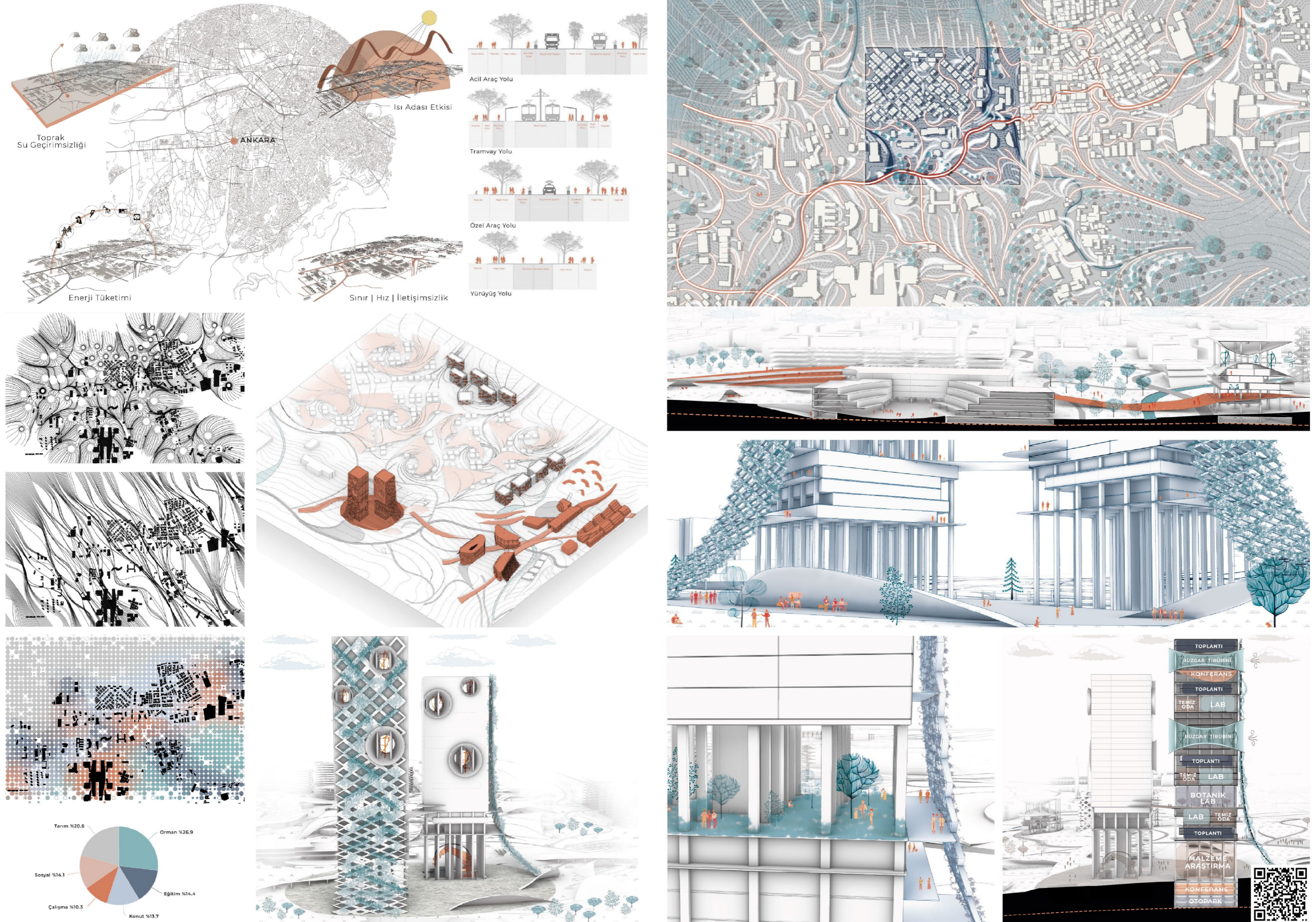
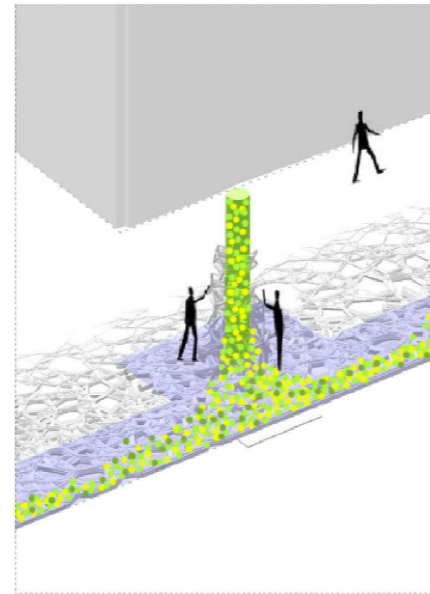
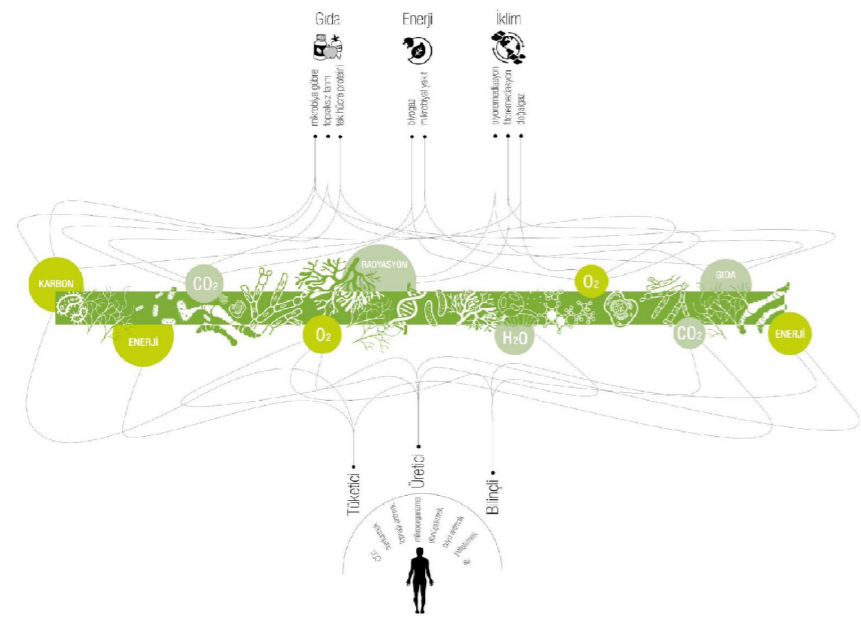
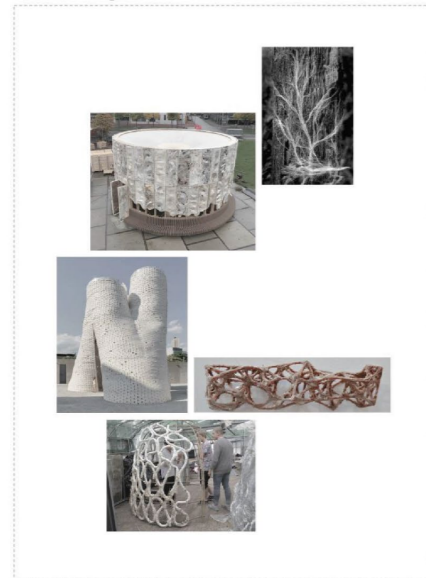
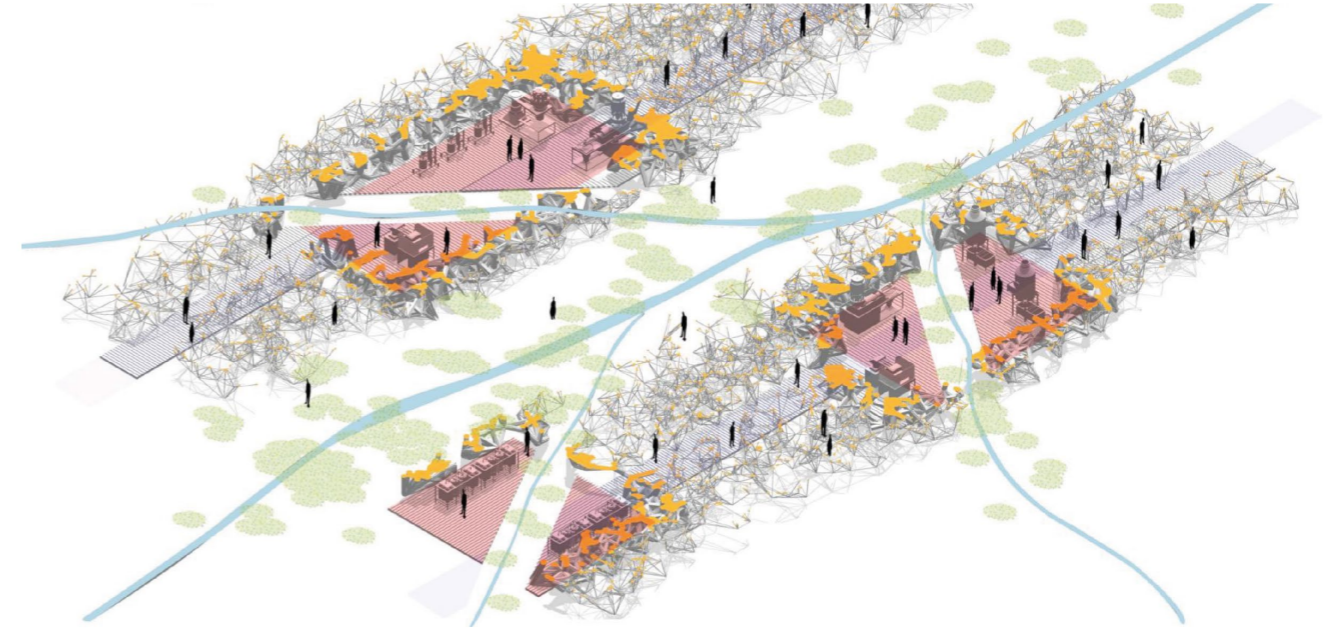


Figure Appendix 6: A Series of Visual Fragments Belonging to the Case 4, EARTH-DECONSTRUCTION, by Asya Soylu, Gökçe Ünlü, Nilsu Taşel.

APPENDIX 7



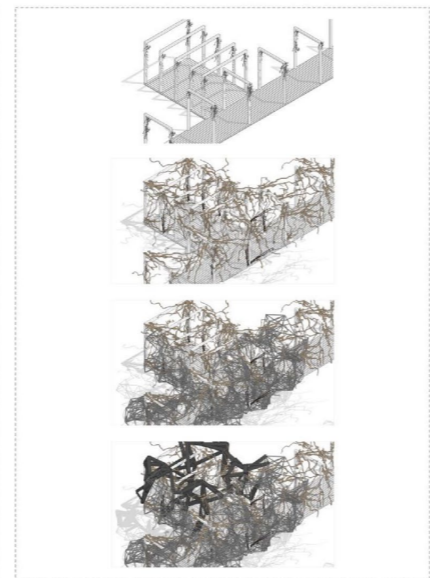
Kent Senaryosu: Biyotik Jeneratör



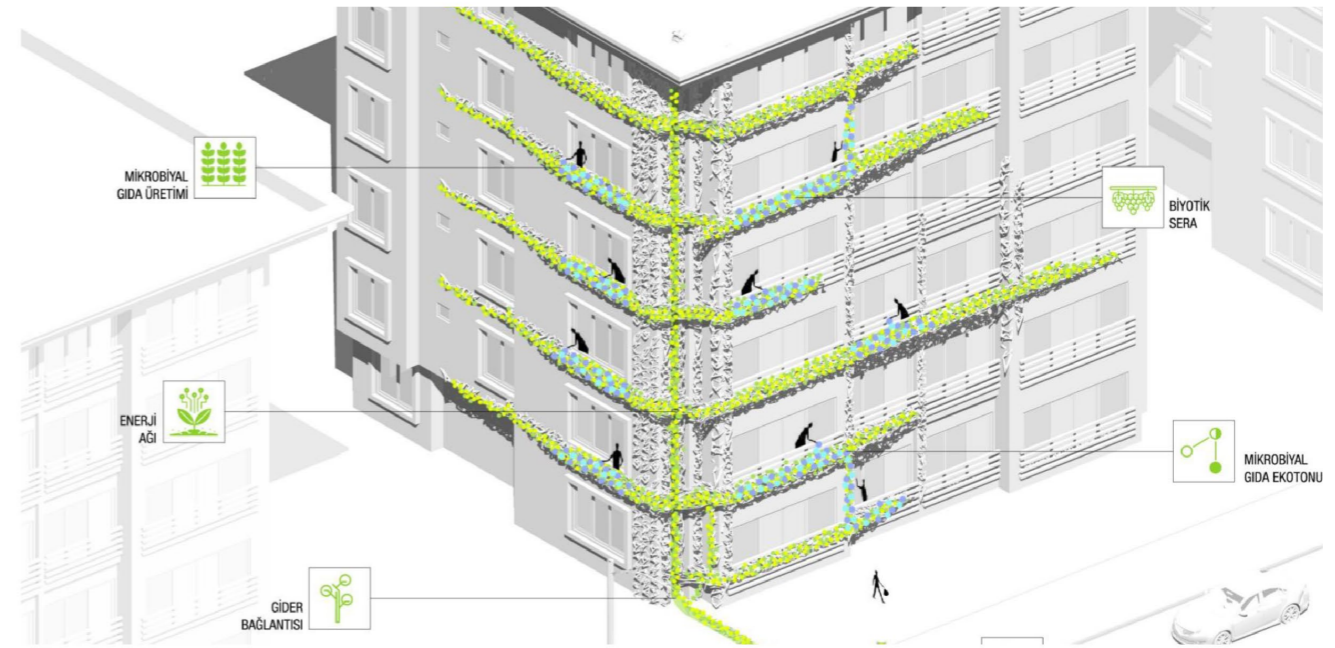
Malzeme: Miselyum



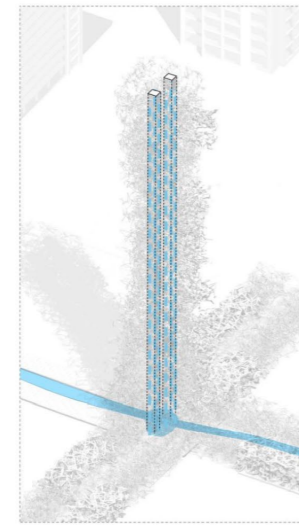
Tektonik: Biyo-Strüktür



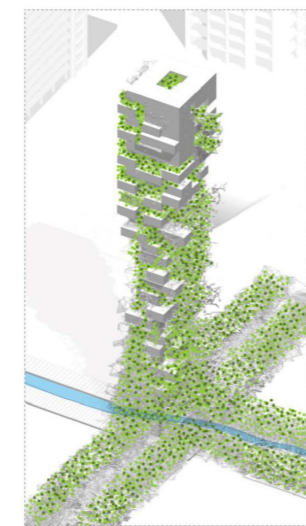
Oluşum: Kurgusal İz



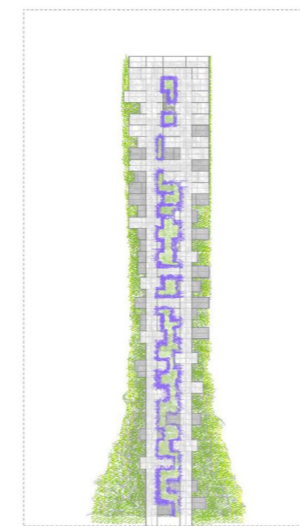
BIO-ARGE: Ağı Kurgusu



BIO-ARGE: Hidroloji İlişkisi



BIO-ARGE: Biyotik Yayılım



BIO-ARGE: İlişki Kesiti



Figure Appendix 7: A Series of Visual Fragments Belonging to the Case 5, BIOTIC URBAN NETWORK, by Ece Melisa Tunca, Oğuz Kağan Erge, Zeynep Göktoprak.

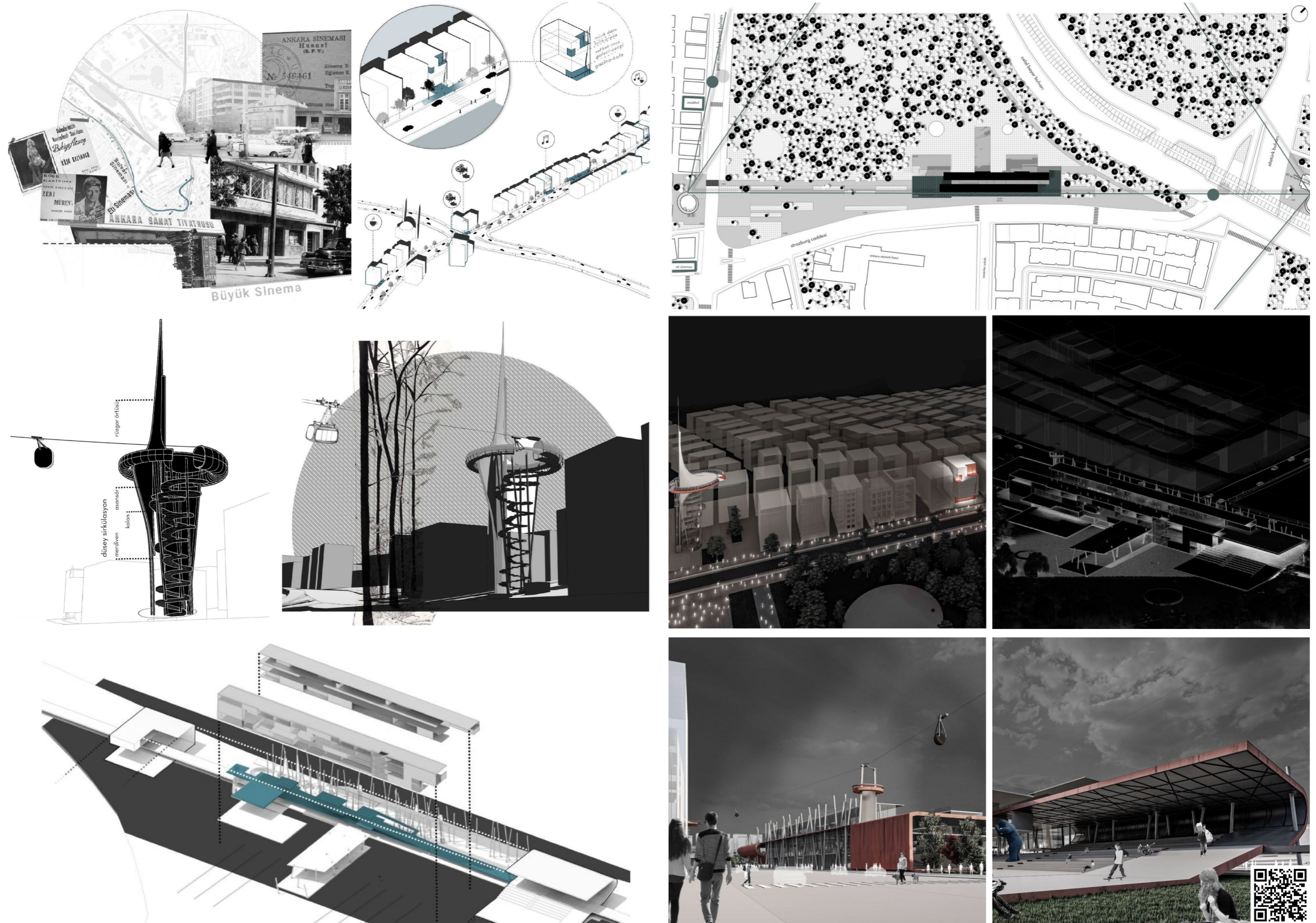


Figure Appendix 8: A Series of Visual Fragments Belonging to the Case 6, NEXUS, by Bengüsu Yeşiloğlu, Gökhan Sagun, İrem Malgaş.

APPENDIX 9

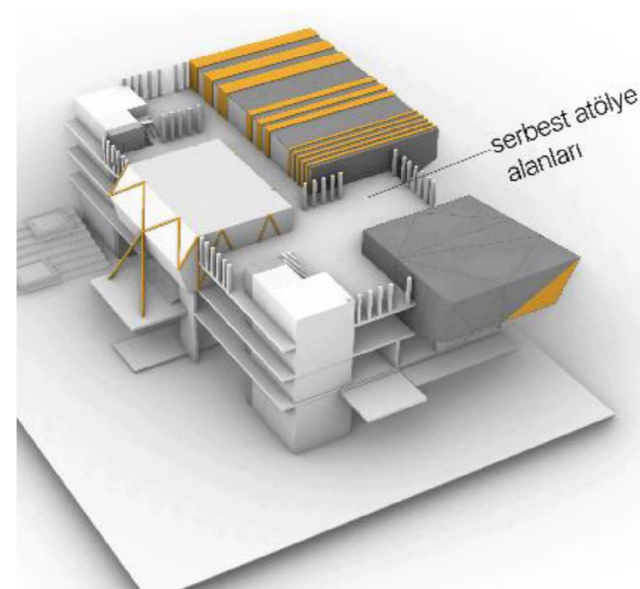
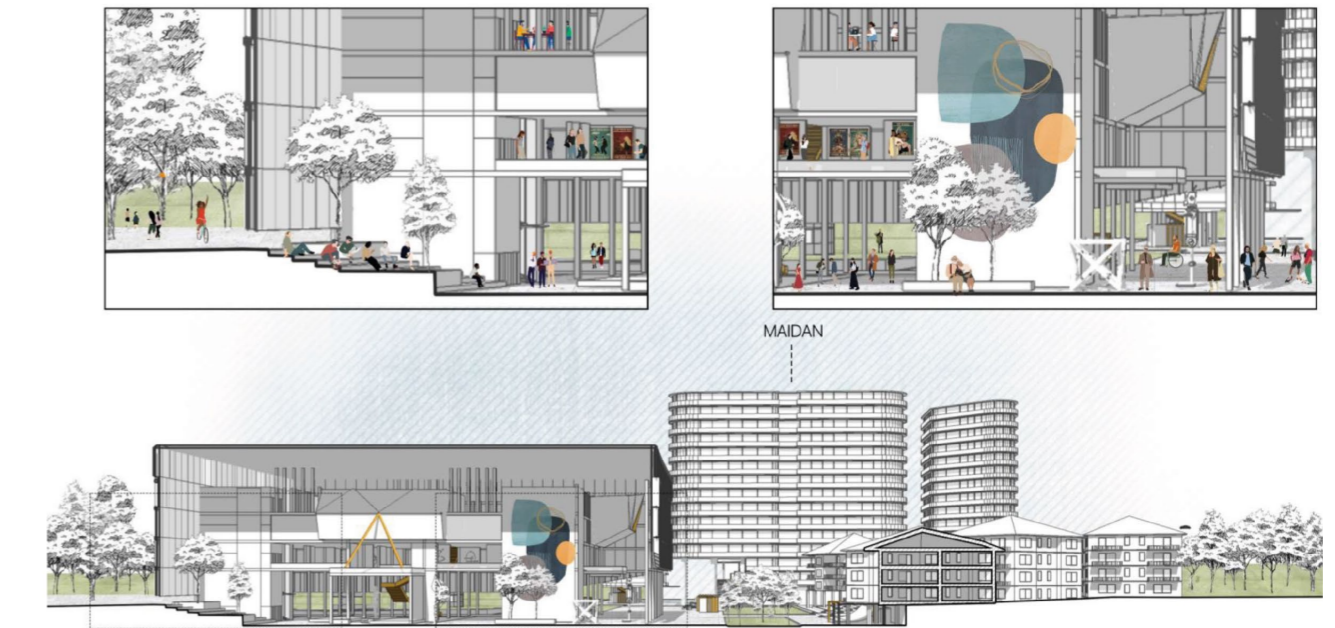
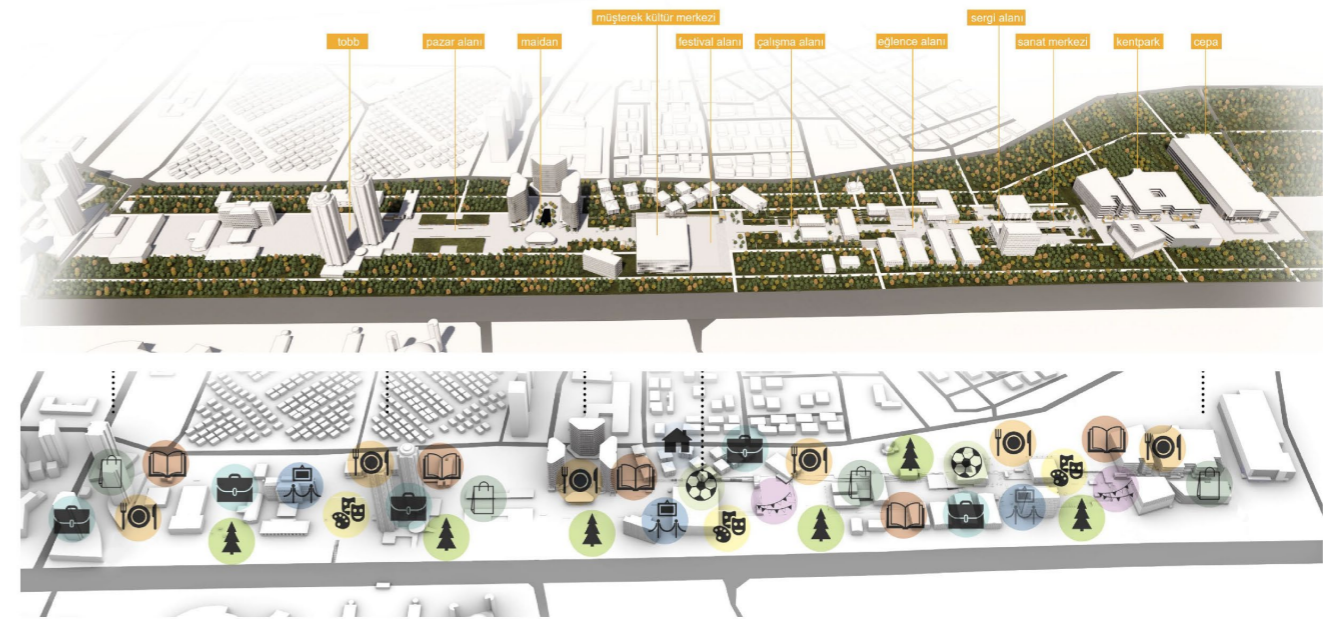
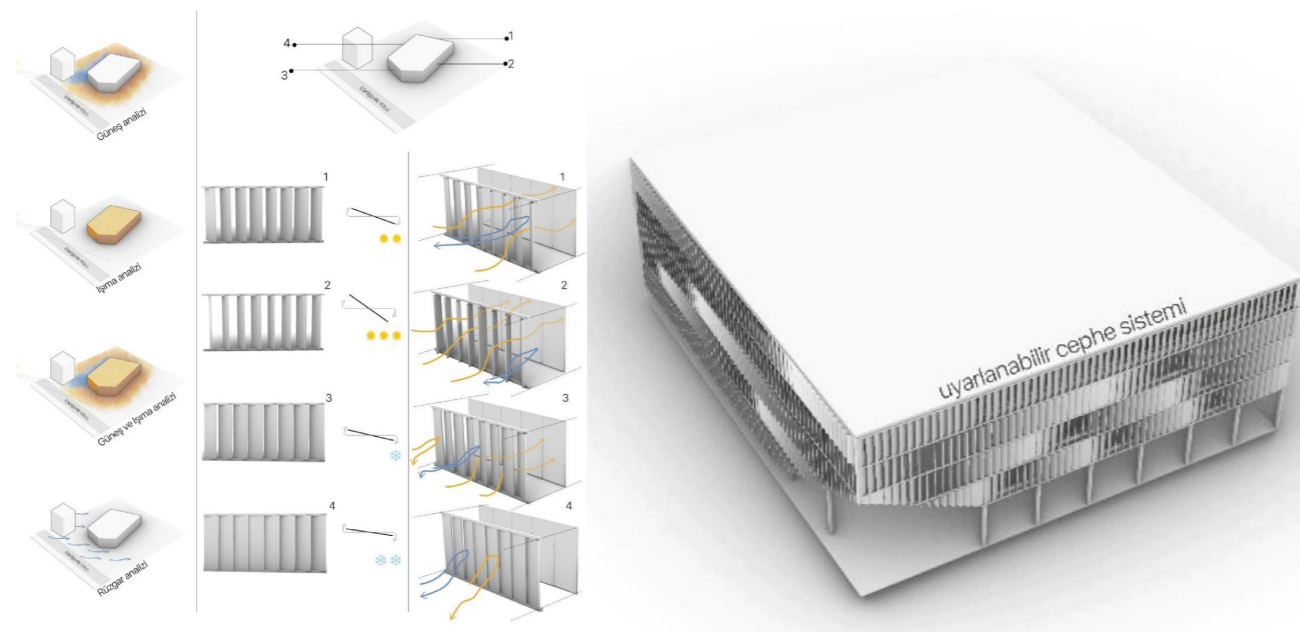
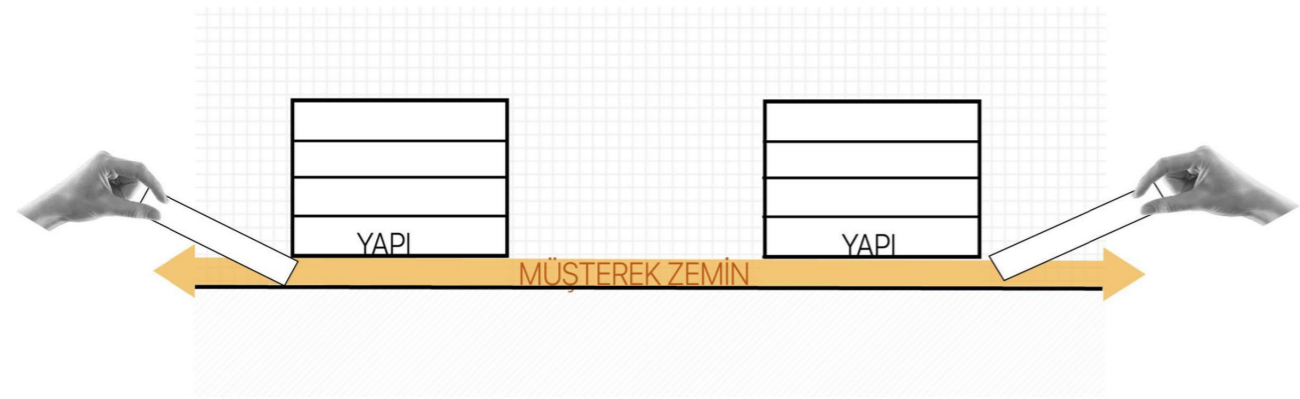


Figure Appendix 9: A Series of Visual Fragments Belonging to the Case 7, COMMON SPACE, by Ebrike Karaca, Hilal Etleç, Merve Kırathlı.

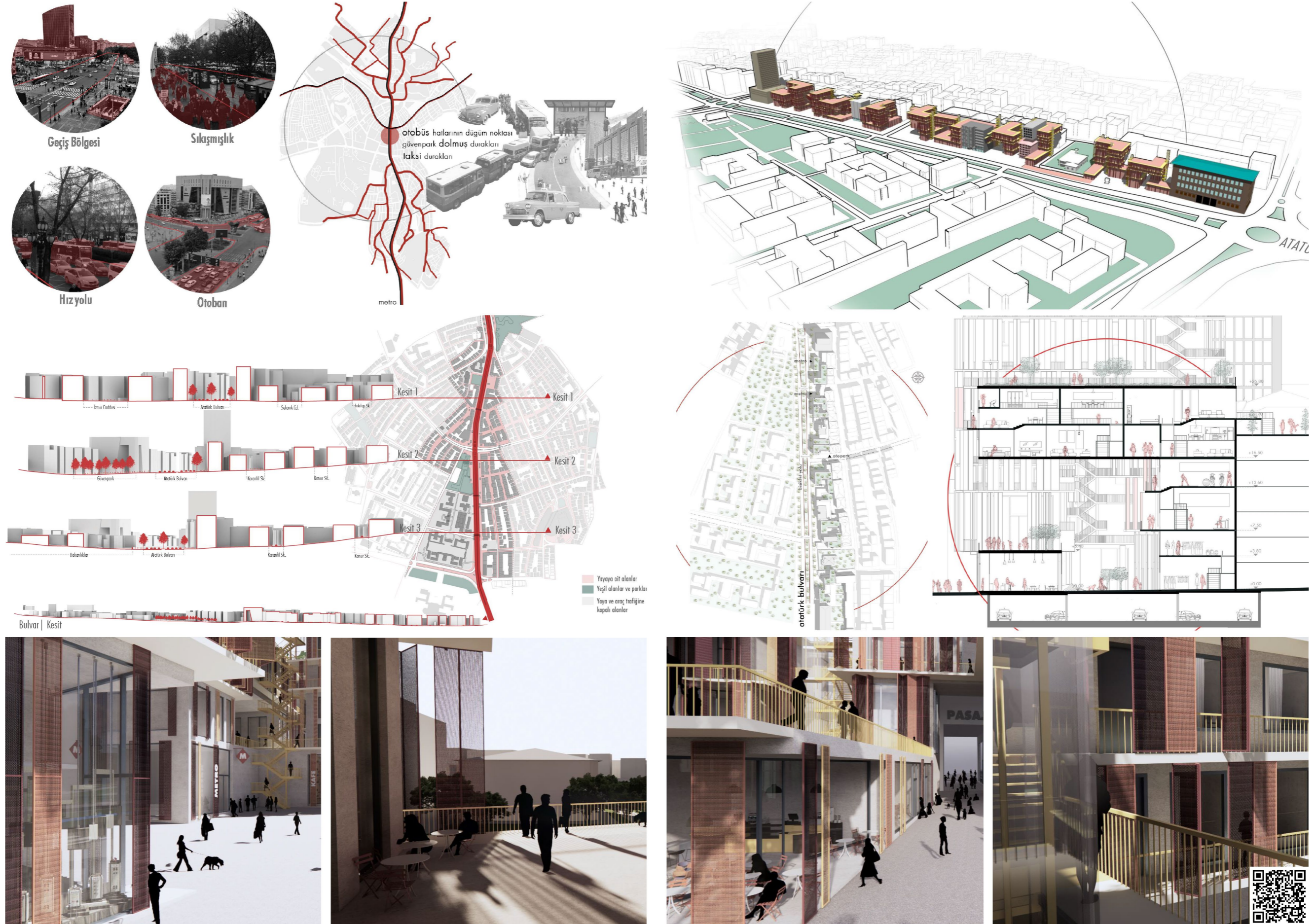


Figure Appendix 10: A Series of Visual Fragments Belonging to the Case 8, BOULEVARD XYZ, by Elif Nur Bek, Zeynep Akdemir.

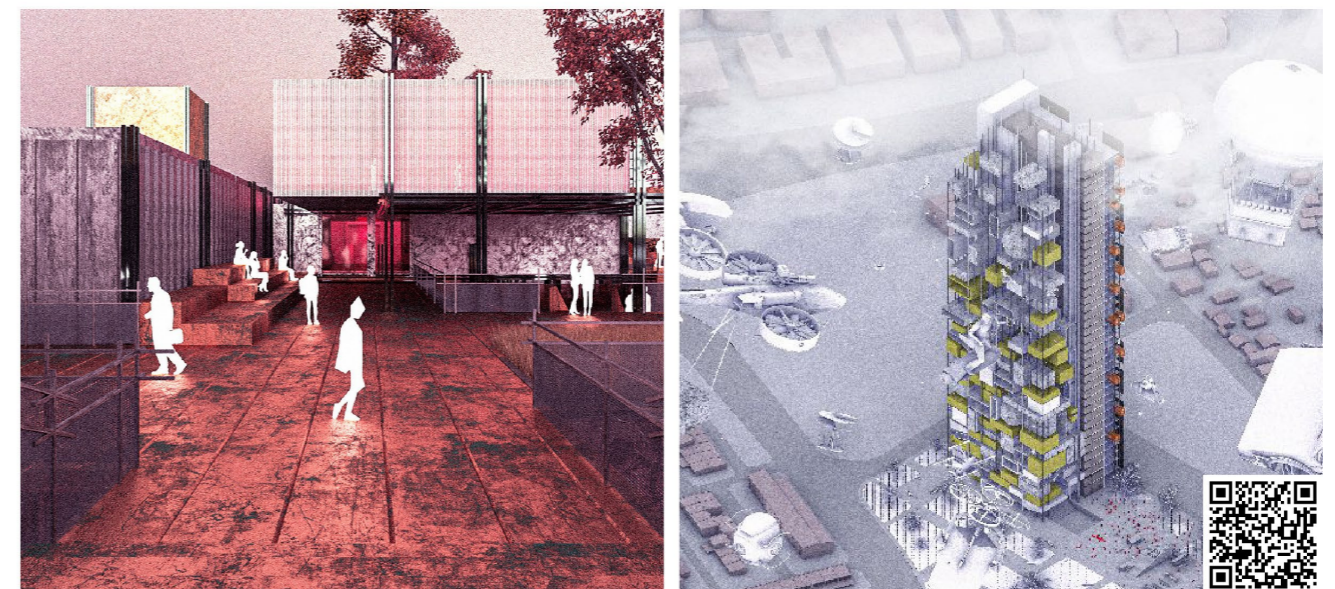
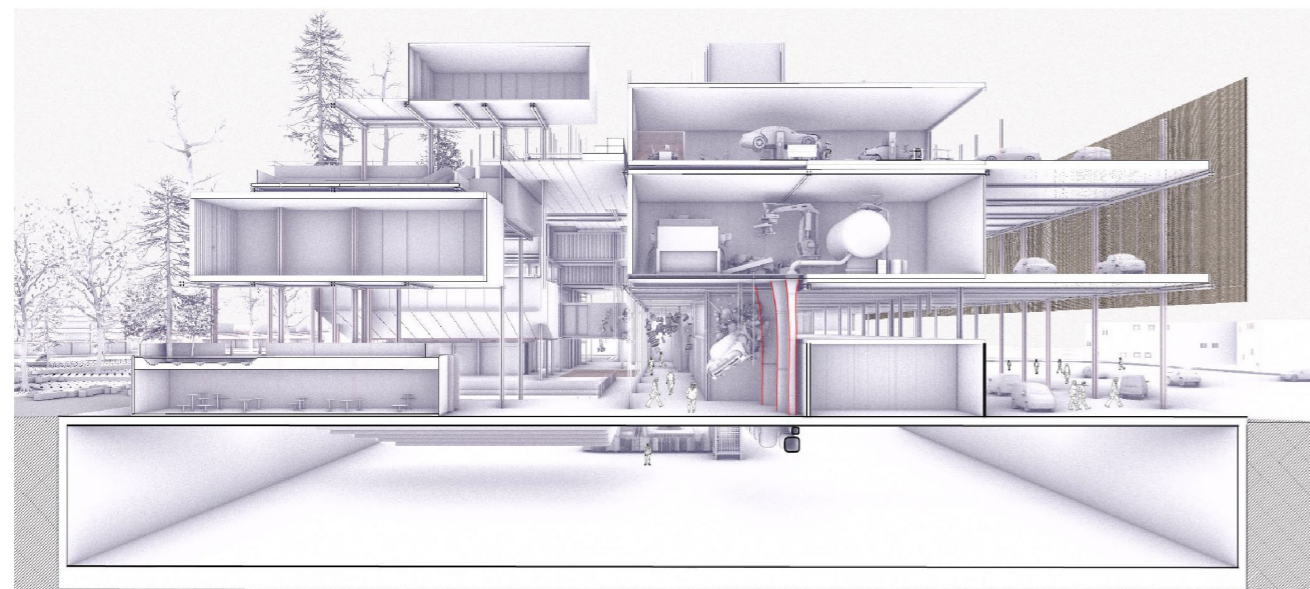
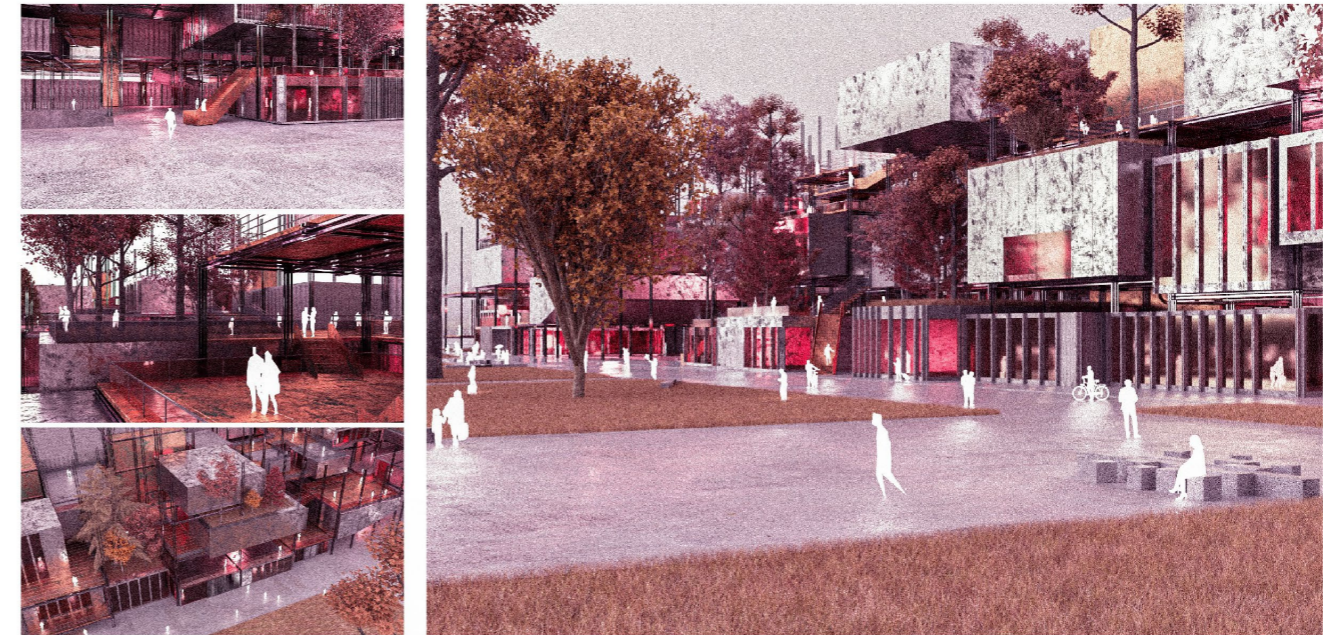
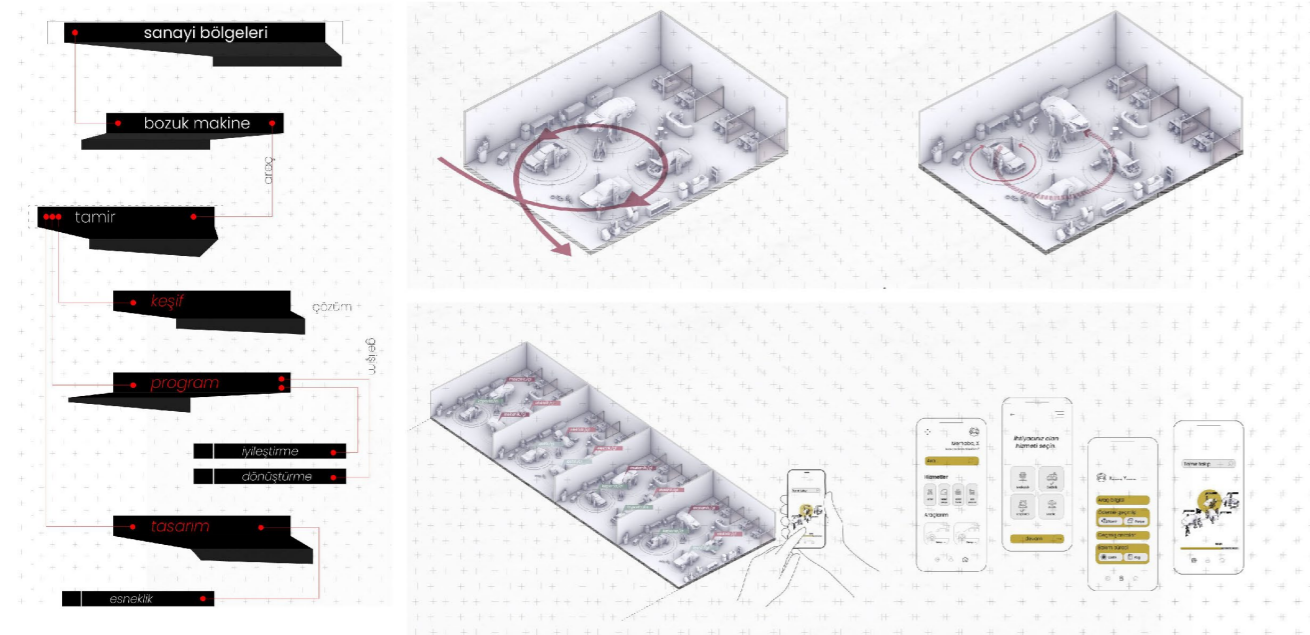
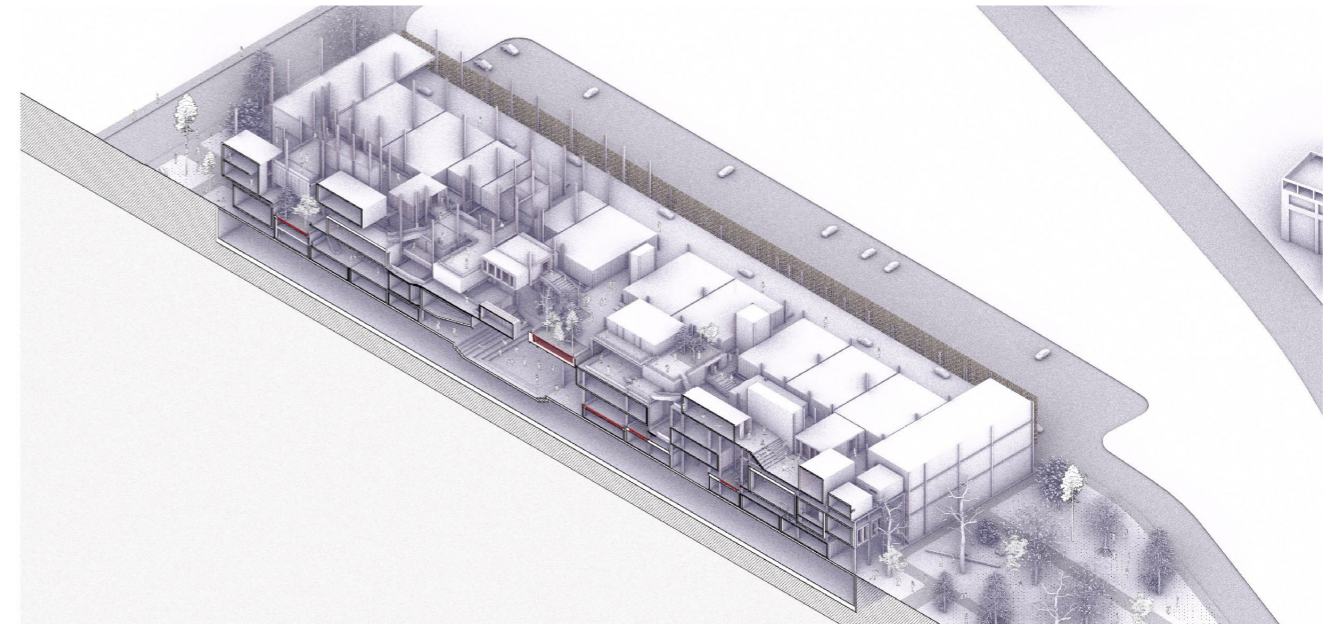


Figure Appendix 11: A Series of Visual Fragments Belonging to the Case 9, THE REUNION, by Yakup Cesur.



Figure Appendix 12: A Series of Visual Fragments Belonging to the Case 10, OIKOS, by Çağlısu Kardeş.



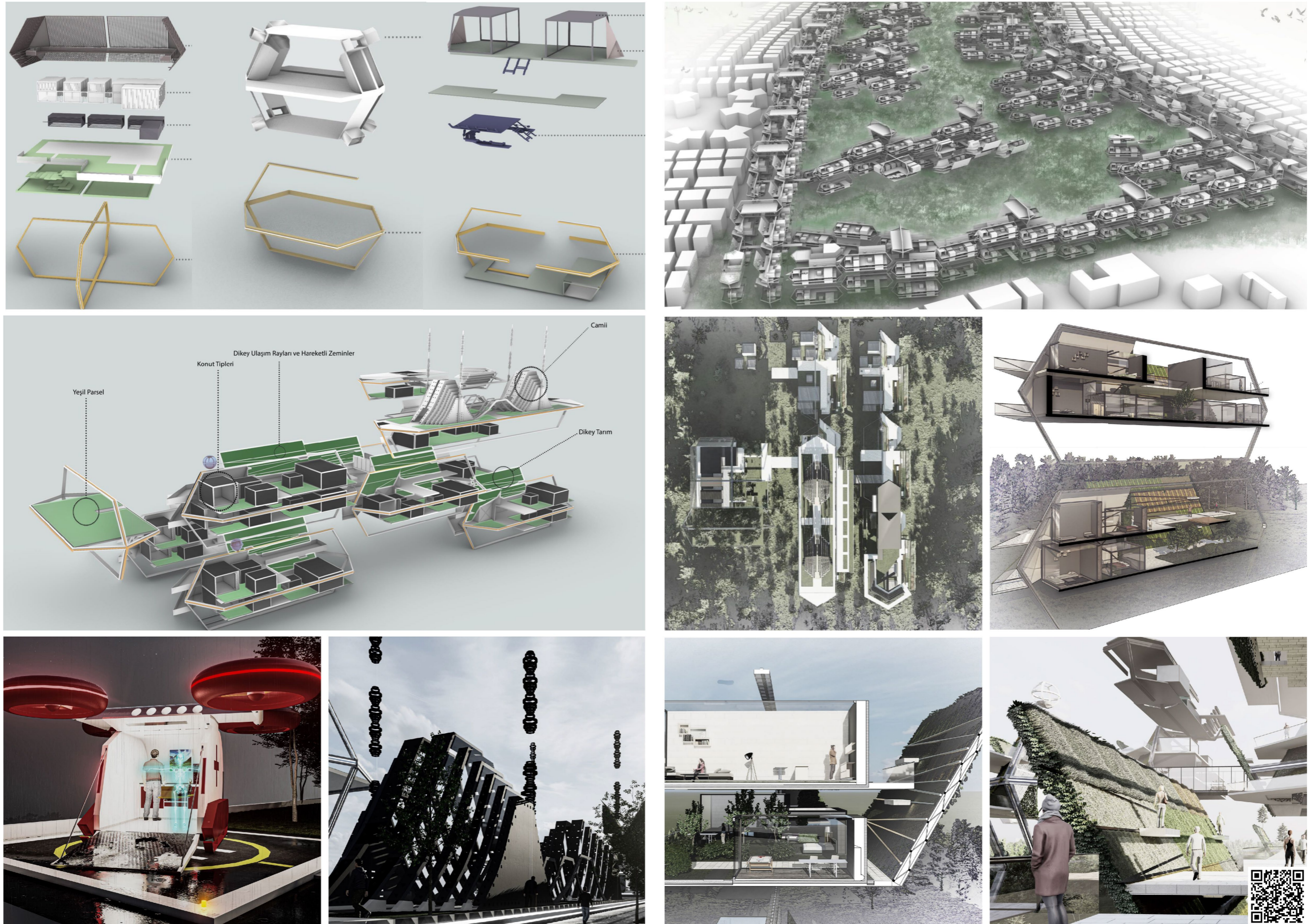


Figure Appendix 13: A Series of Visual Fragments Belonging to the Case 11, SEPERATE, by Adir Rumet Birtane, Levent Batu Özenalp, Yusuf Kimyon.



Figure Appendix 14: A Series of Visual Fragments Belonging to the Case 12, BETWEENNESS, by Elif Nur Bek, Zeynep Akdemir.

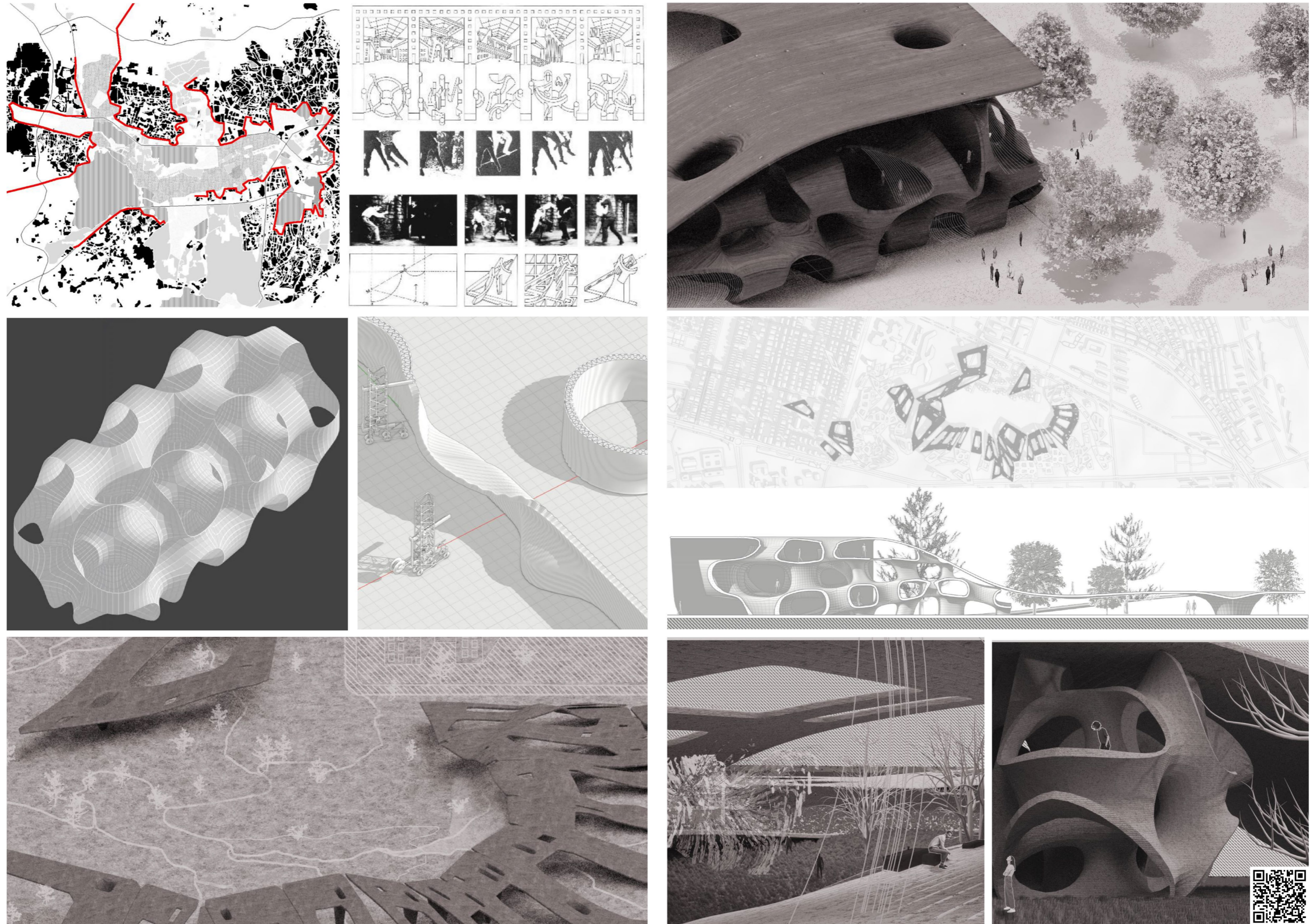


Figure Appendix 15: A Series of Visual Fragments Belonging to the Case 13, METROPOLIS BODY, by Alperen Pehlivan.

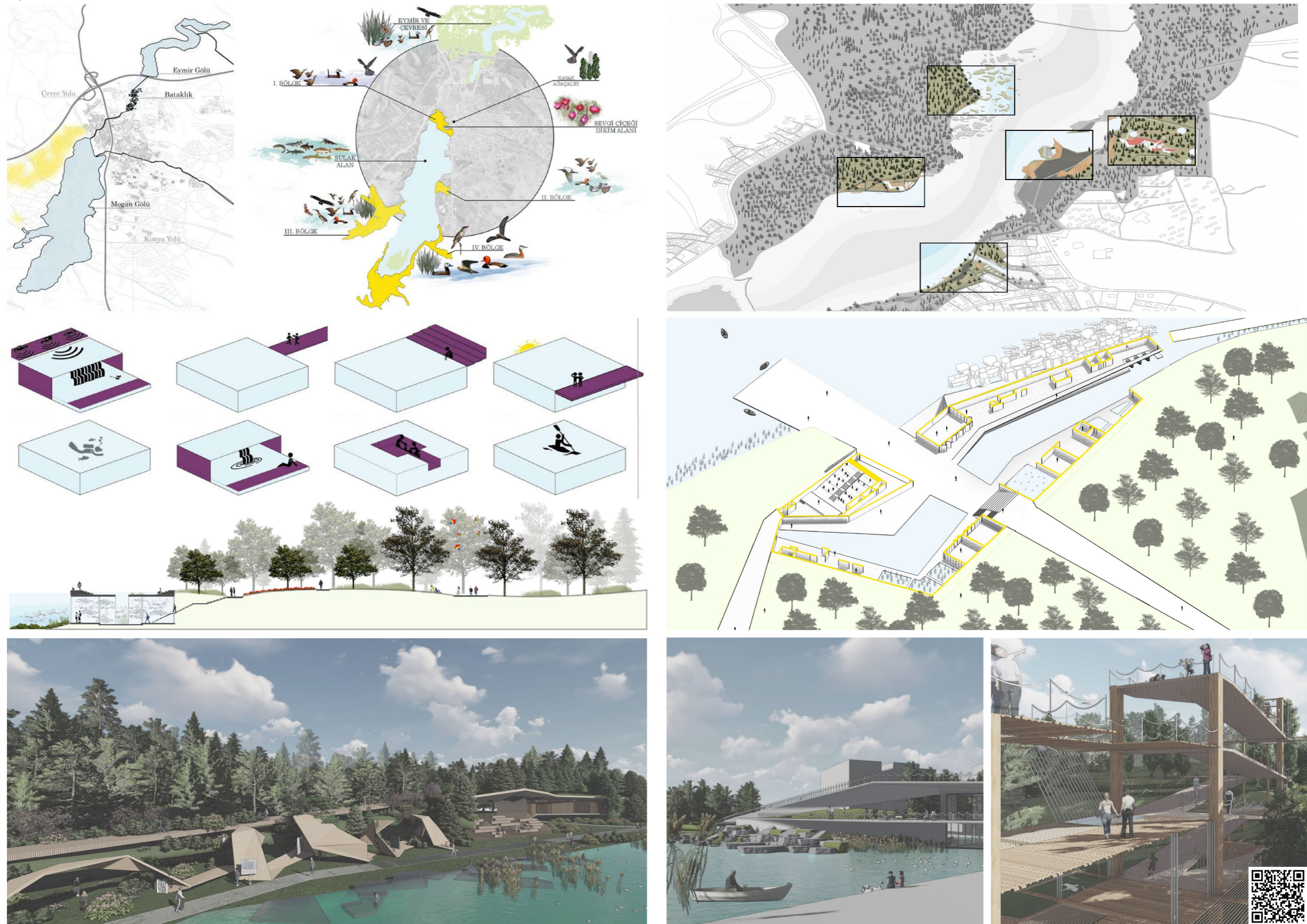


Figure Appendix 16: A Series of Visual Fragments Belonging to the Case 14, THE WATER, by Damla Özden, Esra Çopur, Gülşah Karagöz, Selahattin Nacar.

APPENDIX 17



Figure Appendix 17: A Series of Visual Fragments Belonging to the Case 15, KITSCH, by Kerem Berkay Taş, Püren Bahçıvan, Sevim Pınar Yorulmaz.

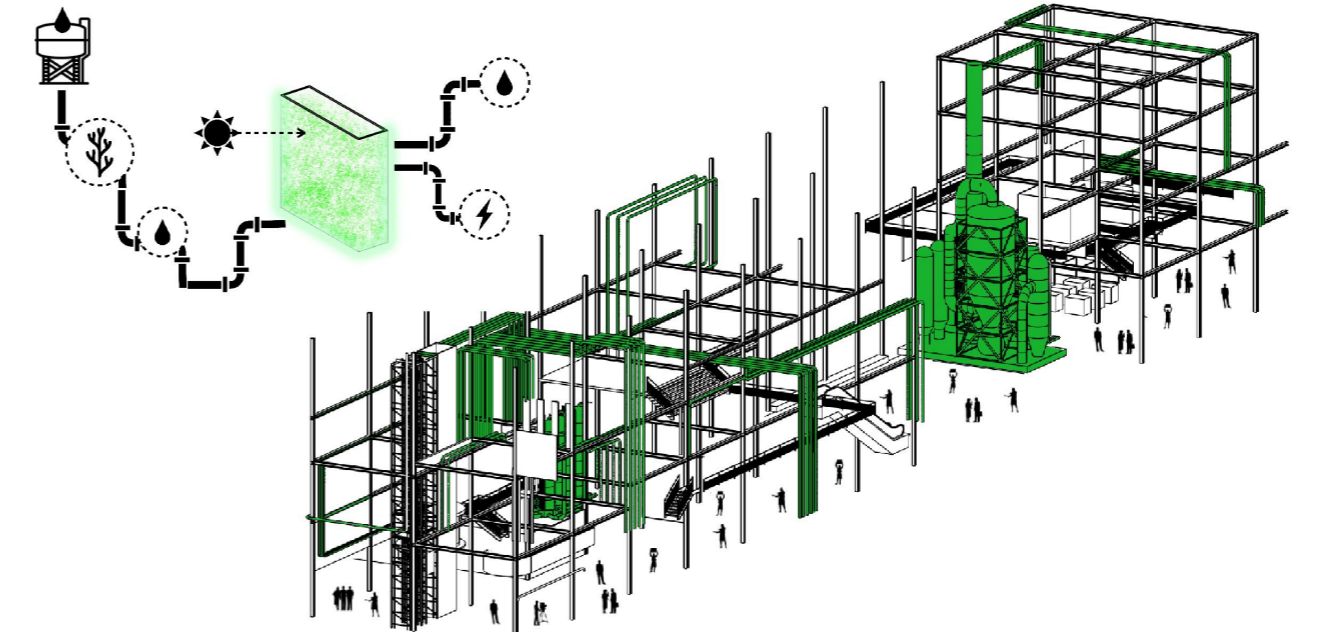
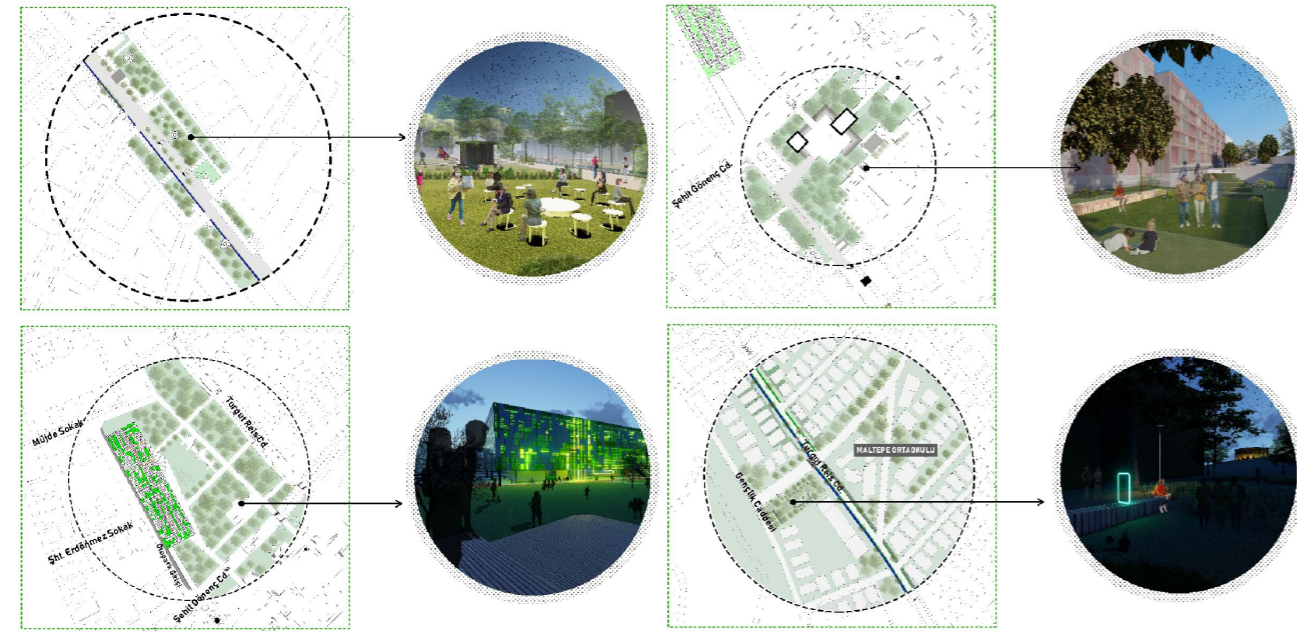
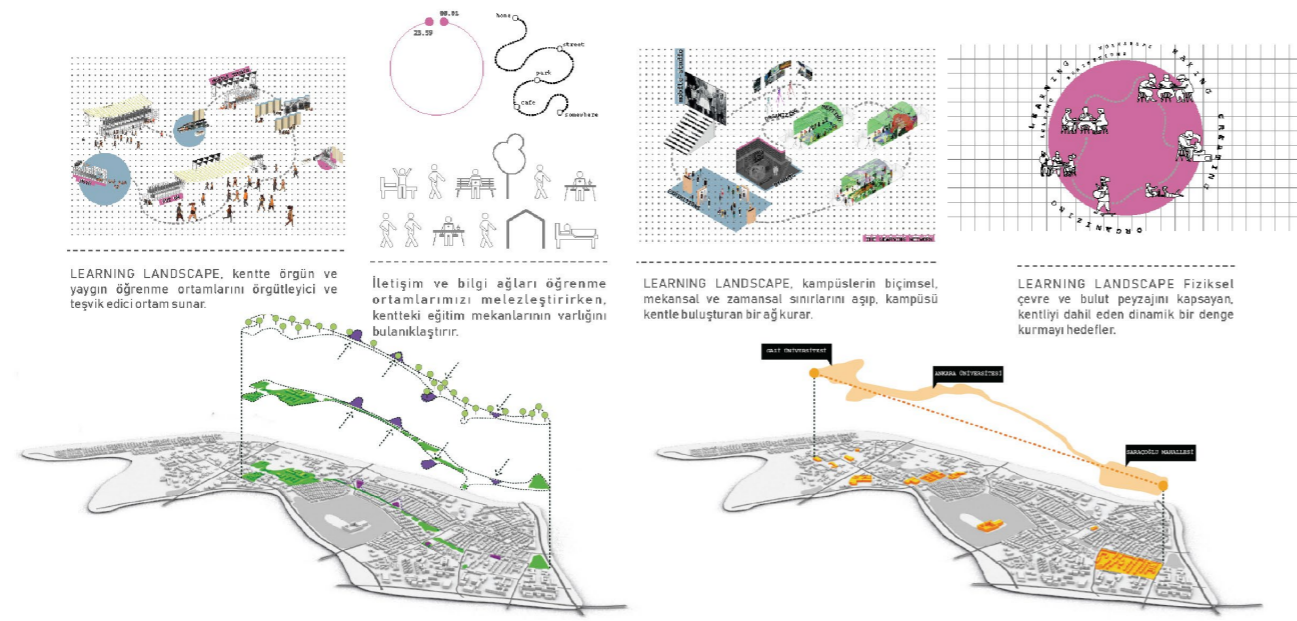


Figure Appendix 18: A Series of Visual Fragments Belonging to the Case 16, LEARNING LANDSCAPE, by Asude Aydın, Semaye Efe, Şengül Bulut.

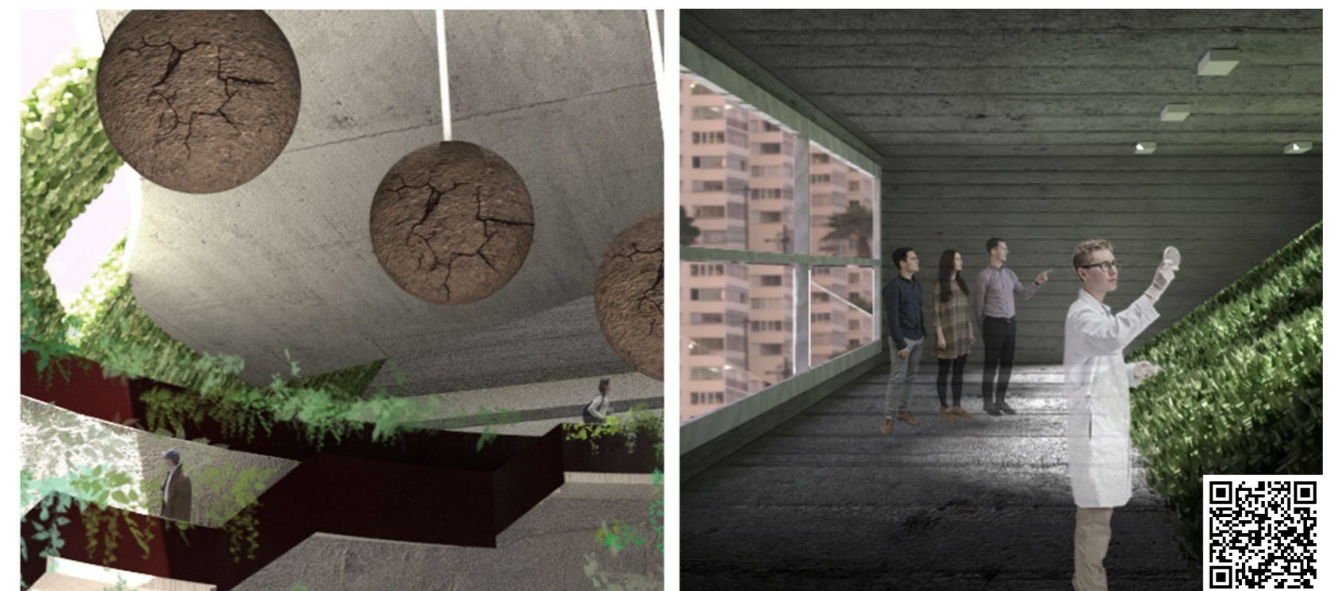
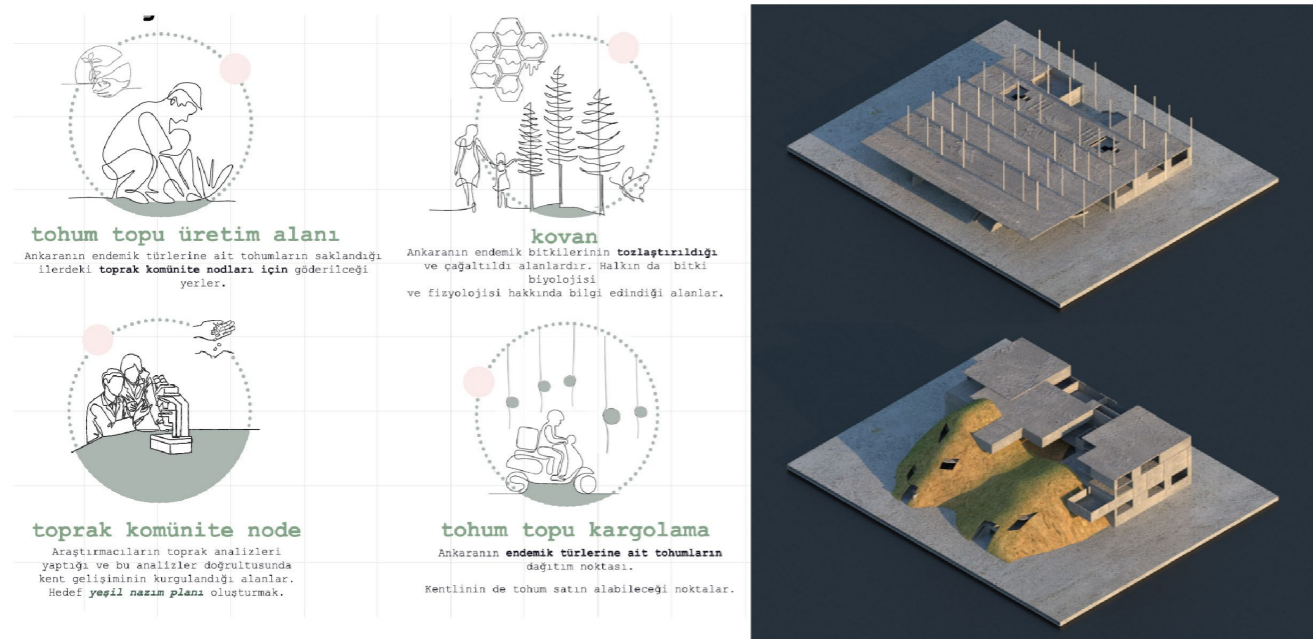
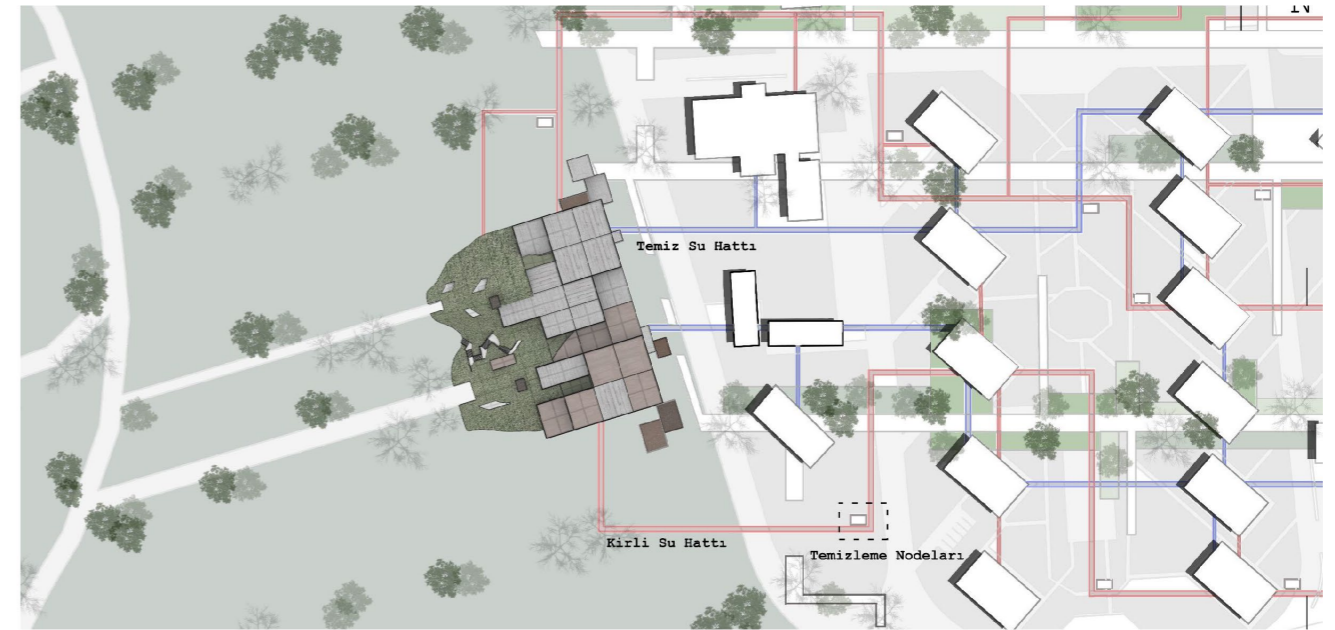
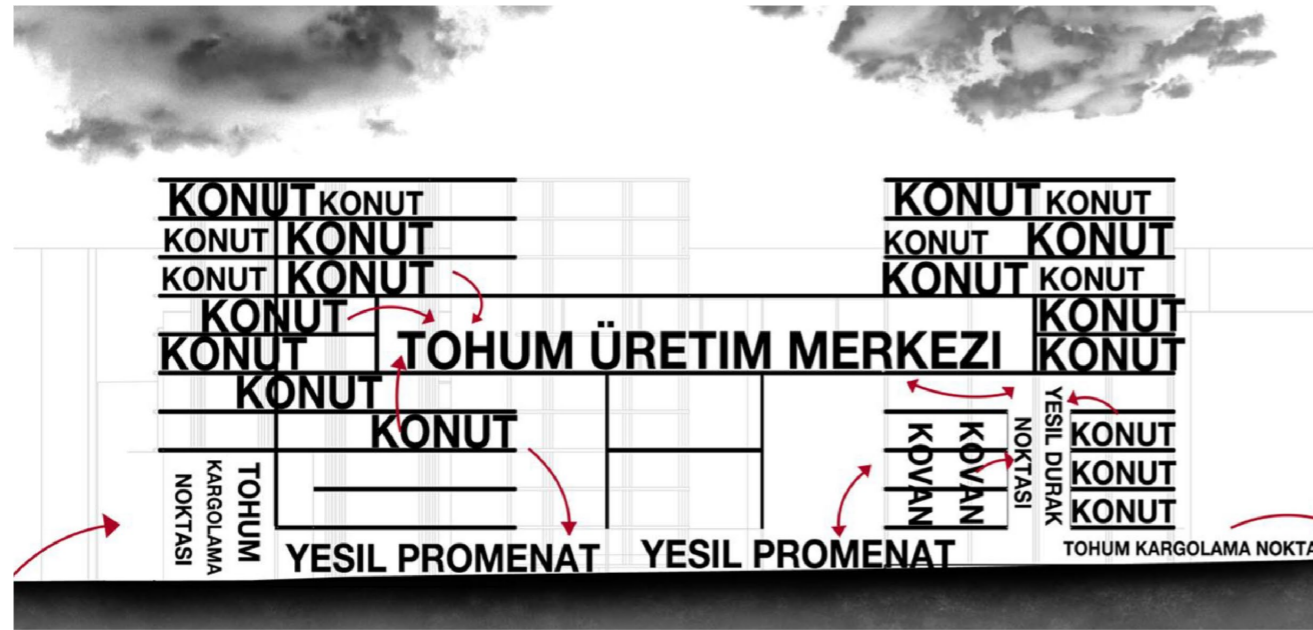


Figure Appendix 19: A Series of Visual Fragments Belonging to the Case 17, THE LOCK, by Burçin Pelin Kantaş.

