METU CAMPUS GATE A1: AN ARCHITECTURAL DETAIL

A THESIS SUBMITTED TO
THE GRADUATE SCHOOL OF NATURAL AND APPLIED SCIENCES
OF
MIDDLE EAST TECHNICAL UNIVERSITY

BY

AYŞE SETENAY ÖZSOY

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR
THE DEGREE OF MASTER OF ARCHITECTURE
IN
ARCHITECTURE

DECEMBER 2022

Approval of the thesis:

THESIS TITLE

submitted by **AYŞE SETENAY ÖZSOY** in partial fulfillment of the requirements for the degree of **Master of Science** i**n Architecture, Middle East Technical University** by,

Prof. Dr. Halil Kalıpçılar
Dean, Graduate School of **Natural and Applied Sciences** _____

Prof. Dr. F. Cânâ Bilsel
Head of the Department, **Architecture** _____

Prof. Dr. Ayşen Savaş Sargın
Supervisor, **Architecture, METU** _____

Examining Committee Members:

Assist. Prof. Dr. Esin Kömez Dağlıoğlu
Architecture, METU _____

Prof. Dr. Ayşen Savaş Sargın
Architecture, METU _____

Assoc. Prof. Dr. Umut Şumnu
Interior Architecture, Başkent University _____

Date: 08.12.2022

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 are not original to this work.

Name Last name : Ayşe Setenay Özsoy

Signature :

ABSTRACT

METU CAMPUS GATE A1: AN ARCHITECTURAL DETAIL

Özsoy, Ayşe Setenay
Master of Architecture, Architecture
Supervisor : Prof. Dr. Ayşen Savaş Sargın

December 2022, 112 pages

This study focuses on one of the iconic examples of modern architecture in Ankara, Middle East Technical University (METU) Campus. The purpose of this study is to investigate the significance of the Middle East Technical University Campus, a prominent modern architecture artefact in Ankara. The METU campus has had a defined and autonomous land since its establishment. As a gated campus, it was interacted with the city through its monumental entrance gate, A1. This complex structure takes place in the urban memory with its symbolic meaning as well as its architectural image and it can be evaluated as an object of representation. Therefore, this study defines the Gate A1 as an interface between the METU campus and the city, Ankara. When the entire campus is considered, the Gate A1 is an architectural element that can be described as a "detail" with its modest scale. The gate will be examined as a part representing the whole, the METU campus. Examining the main entrance gate as an architectural detail will also reveal the structural and material clues regarding the architects' intentions for the campus's first impression. It will also compile the readings for the first image designed for the campus. The gate's structural, plastic, and surface qualities will be revealed by a thorough study of its meticulously drawn plans, sections, facades and detail drawings.

Keywords: Architectural Detail, Representation, Gate, Modern Campus, METU

ÖZ

ODTÜ KAMPÜSÜ A1 KAPISI: BİR MİMARİ DETAY

Özsoy, Ayşe Setenay
Yüksek Lisans, Mimarlık
Tez Yöneticisi: Prof. Dr. Ayşen Savaş Sargın

Aralık 2022, 112 sayfa

Bu çalışma Ankara'daki modern mimarinin ikonik örneklerinden biri olan odtü kampüsüne odaklanmaktadır, aynı zamanda halen devam etmekte olan ve modern mimarinin kampüs örnekleri üzerine çalışan *Campus Utopias* projesinin bir parçasıdır. Bu çalışmanın amacı, Ankara'da öne çıkan bir modern mimari eser olan Orta Doğu Teknik Üniversitesi Kampüsü'nün öneminin araştırılmasıdır. ODTÜ yerleşkesi kurulduğu günden itibaren tanımlanmış ve özerk bir araziye sahiptir. Kapalı kampüs alanı kentle etkileşimini anıtsal A1 kapısı ile sağlamaktadır. Bu karmaşık yapı, mimari imajının yanı sıra sembolik anlamı ile de kentsel bellekte yer almaktadır. Dolayısıyla A1 kapısı bir temsil nesnesi olarak değerlendirilebilir. Bu nedenle, bu çalışma A1 Kapısını ODTÜ kampüsü ile Ankara kenti arasında mimari bir ara yüz olarak tanımlamaktadır. Kampüsün tamamı düşünüldüğünde A1 Kapısı, mütevazı ölçeği ile "detay" olarak nitelendirilebilecek bir mimari ögedir. Bu bağlamda, A1 kapısı, ODTÜ yerleşkesinin bütününü temsil eden bir parça olarak incelenmiştir. Ana giriş kapısının mimari bir detay olarak araştırılmış olması, mimarların kampüsün ilk izlenimine yönelik niyetlerine ilişkin yapısal ve maddi ipuçlarını da ortaya çıkarmıştır. Ayrıca, kampüs için tasarlanan ilk görüntünün okumaları da derlenmiştir. Kapının strüktürel, plastik ve yüzeysel özellikleri,

heykelimsi yapısının tüm kampüsün mimari oluşumuna dair birçok ipucunu gizlediği titizlikle çizilmiş planları, kesitleri, cepheleri ve detay çizimleri ile ortaya çıkarılmıştır.

Anahtar Kelimeler: Mimari Detay, Temsil, Kapı, Modern Kampüs, ODTÜ

To my family & the memory of my grandmothers

ACKNOWLEDGMENTS

I owe my greatest debt to my advisor, Prof. Ayşen Savaş for her guidance, complete support, and understanding. This thesis would not have been completed without her patience, insightful comments, and attention. Working with her has been a constant source of academic, intellectual, and cultural nourishment for me. She taught me how to think about architecture as a mentor, and she also provided scholarly advice and constant encouragement. I will always be grateful.

I would like to thank the members of my examining committee, Assist.Prof. Esin Kömez Dağlıoğlu and Assist.Prof. Umut Şumnu, for their insightful comments and discussions. I would like to thank Umut Şumnu in particular for his vast knowledge and assistance since the first day I started university. He has always been a great mentor for me. I want to express my gratitude to Prof. Dr. Nur Çağlar. Any word to thank her would be insufficient for what I have learned from her.

I am thankful to my friends Melike Yürekli, Yasemin Fillik, Bengisu Derebaşı, Sezin Sarıca, Uzay, and Ege Doğan for their insightful architectural discussions and mental support throughout the process. I would like to thank Talha Yazıcı and Çağatay Erbaş for their assistance with the 3D modeling of the Gate. I would also like to thank my second family, Kübra Gelişli, İsmail Can Gözen, Melda Erdinç, Zeynep Öziş, Deniz Tan Celasun, Deniz Yılmaz, and Siide Önlü for their constant encouragement and support. This would have been impossible without you. This work also owes a debt to Onur Kutluoğlu, colleague and companion, who devoted both his time and thought during the most difficult period. I could not skip mentioning my horses; Horka, Zeus, Bilberry, Arjette, Alahan, Gece, Einstein, and Olivia thank you too!

This thesis would have never been accomplished without the support of my dear family. I would like to thank my mother Birgül Özsoy, my father Vedat Özsoy, and my sister Selenay Özsoy for their infinite passion, support, and love. My gratitude never ends.

TABLE OF CONTENTS

ABSTRACT v

ÖZ vii

ACKNOWLEDGMENTS x

TABLE OF CONTENTS xi

LIST OF FIGURES xiii

CHAPTERS

1 INTRODUCTION 1

1.1 The METU Campus 3

1.2 Aims and Objectives 5

1.3 Hypothesis and Methodology 5

1.4 Outline of the Thesis 6

2 DETAIL AND GATE AS REPRESENTATIONAL ELEMENTS IN ARCHITECTURE 7

2.1 Detail 7

2.1.1 Emergence of the Term Detail in Architecture 9

2.1.2 Architectural Detail as a *Loci* 13

2.1.3 Architectural Detail as Narrative Element 14

2.1.4 Architectural Detail as Tectonic Expression 17

2.1.5 As a Context for Narrative Details: The METU Campus 20

2.2 Gate 21

2.2.1 Gate as a Representational Artefact 22

2.2.2 Gates of the METU Campus 26

3 AN UTOPIA: THE METU PROJECT* 29
3.1 Middle East Technical University 29
3.2 Modern Architecture in Turkey 30
3.3 Establishment of METU 32
3.3.1 Architectural Design Competitions for the METU Campus 33
3.3.2 Competition Drawings 34
3.3.3 New Construction Techniques on the Campus 35
3.4 The METU Campus as a Gated Community 37
3.4.1 Gates of the METU Campus 37
3.4.2 The Main Gate A1 41
3.4.2.1 Gate A1 and *Bilim Ağacı* 41
3.4.2.2 Gate A1 and Construction of the Metro 43
3.4.2.3 Social and Political Events at the Gate 46
4 METU GATE A1 AS AN ARCHITECTURAL DETAIL 47
4.1 Gate A1 49
4.2 Understanding Gate A1 50
4.3 Drawings of Gate A1 50
4.4 Details of Gate A1 54
4.4.1 Architectural Elements That Constitute the Gate A1 54
4.4.2 Gate A1 and Campus Landscape 90
4.4.3 From Campus to Gate: Continuing Narrative Details 93
4.4.4 Original Ideas of the Architects 103
5 CONCLUSION 105
REFERENCES 109

LIST OF FIGURES

FIGURES

Figure 1.1. Different scale of the details that constitutes the METU campus. 3
Retrieved from https://archives.saltresearch.org/handle/123456789/133

Figure 2.1. Column as a part, drawings of Vesta's Temple, Sebastiano Serlio. 8
Retrieved from
https://commons.wikimedia.org/wiki/File:Coupe_et_plan_du_Temple_de_la_Vesta_%C3%A0_Tivoli.jpg

Figure 2.2. Parts of a column according to order, author unknown. 8
Retrieved from https://blog.marcantonioarchitects.com/the-orders-of-architecture-a-primer/

Figure 2.3. Details among details, an example of *analytique*, Campidoglio, Rome. 10
Retrieved from https://tr.pinterest.com/pin/214484000974966505/

Figure 2.4. Concept drawing of the METU campus Gate A1, Altuğ and Behruz Çinici, 1967. 10
Retrieved from https://archives.saltresearch.org/handle/123456789/133

Figure 2.5. Corbusier's sketches for Rodchamp Chapel. 16
Figure 2.6. Corbusier's subtly drawn detail drawings for window mechanisms, door latches, skylights, lamps, and fittings. Drawings are full of the record of struggle to make these details work.....16
https://www.re-thinkingthefuture.com/rtf-fresh-perspectives/a823-15-sketches-by-world-famous-architects/

Retrieved From Samuel, Flora. Le Corbusier in Detail. First Edit. Burlington, MA: Elsevier Limited, 2007, p.6.

Figure 2.7. Brick country house interior gates, Mies van der Rohe, 1923 (Produced by Author). 25
Figure 2.8. Entrance gate of Bauhaus building Dessau, Walter Gropius, 1925-1926. (Produced by Author)..... 25
Figure 2.9. Enrance gate of Fagus Factory Alfeld, Walter Gropius and Adolf Meyer, 1924. (Produced by Author) 25
Figure 2.10. Aero Saarinen with his gate sketches and gateway model, 1965. 26
Retrieved from http://idaaf.com/eero-saarinen/eero-saarinen-with-model-and-sketches-of-the-jefferson-national-expansion-memorial-gateway-arch-st-louis-mo-ca-1958/

Figure 2.11. Enrance gate of Rodchamp Chapel from exterior, Le Corbusier. 26
Retrieved from https://tr.pinterest.com/pin/46936021100835388/

Figure 2.12. Enrance gate of Rodchamp Chapel from interior, Le Corbusier. 26
Retrieved from https://www.santiagodemolina.com/2017/05/

Figure 2.13. METU Gate A1, 2011..... 26
https://yandex.com.tr/harita/org/orta_dogu_teknik_universitesi_a1_kapisi/136644771770/?ll=32.765534%2C39.884509&panorama%5Bdirection%5D=213.155764%2C-

Figure 3.1. Concrete construction, METU,1950s. 36
Retrieved from https://archives.saltresearch.org/handle/123456789/133

Figure 3.2. Campus gates, (Produced by Author). 39
Figure 3.3. Campus gates, (Produced by Author). 40
Figure 3.4. *Bilim Ağacı* site plan, 1966. 42
Retrived from http://epamimarlik.com/tr/proje/ataturk-ve-devrimler-aniti/

Figure 3.5. View from the first location of the sculpture, 1966. 42
Figure 3.6. View from the current location of the sculpture, 2022 (Produced by Author). 42

Figure 3.7. Suspension bridge, Designed by Barış Yağlı and Ayşen Savaş (Barış Yağlı, 2004). 44
Figure 3.8. Underpass and the Monorail stop, 2005 (Can Çinici). 45
Figure 3.9. Student Upheavals, 2014. 46
Retrived from https://www.ensonhaber.com/galeri/ankaradaki-soma-yuruyusune-polis-mudahalesi

Figure 4.1. Gate A1, 1969. 47
Retrieved from https://ww2.lib.metu.edu.tr/gallery/index.php/Fotograflar/FOTOGRAFLARLA-ODTU-YERLESKESI-TARIHI/ODTU-Giri-Kap-s?page=2

Figure 4.2. 3D visualisation of Gate A1, (Produced by Talha Yazıcı and Author). 48
Figure 4.3. 3D visualisation of Gate A1, (Produced by Talha Yazıcı and Author). 49
Figure 4.4. List of the drawings (Produced by Author). 53
Figure 4.5. Architectural elements of the Gate,(Produced by Author). 54
Figure 4.6. Architectural elements of the Gate,(Produced by Author). 57
Figure 4.7. Gate A1 Plan,(Produced by Author). 58
Figure 4.8. Front view of plastic A and B (Produced by Author). 59
Figure 4.9. Plan and front view of plastic A (Produced by Author). 60
Figure 4.10. Plan and front view of plastic B (Produced by Author). 61
Figure 4.11. On the top defined pattern generated by concrete finishings according to moldings, at the bottom defined pattern generated by *Bulon* and joint lines, (Produced by Author). 62
Figure 4.12. On the top defined pattern generated by concrete finishings according to moldings, at the bottom defined pattern generated by *Bulon* and joint lines, (Produced by Author). 63
Figure 4.13. Various patterns were created using the concrete throughout the campus (Produced by Author) 64
Figure 4.14. Faculty of Arts and Sciences Lecture Hall Building (Model made by Ömer Faruk Ağırsoy, Edited by Author). 65

Figure 4.15. Faculty of architecture facade of block G3, library stairs, library entrance, ashtrays, seating units (Produced by Author). 66
Figure 4.16. Stairs/Gateway between Plastic A and Plastic B, (Produced by Talha Yazıcı and Author). 67
Figure 4.17. Stair plan (Produced by Author). 68
Figure 4.18. Traces of steps (Produced by Author) 68
Figure 4.19. Traces of steps throughout campus (Produced by Author). 70
Figure 4.20. Details of the gateeay and stairs (Produced by Author). 71
Figure 4.21. Embedded projector pits and system section (Produced by Author).. 72
Figure 4.22. Security room, 1969 (Produced by Author). 73
Figure 4.23. Security room plans dated 1969,1973 (Produced by Author). 74
Figure 4.24. Material and lighting element details (Produced by Author) 75
Figure 4.25. Window patterns faculty of architecture and security room facade (Produced by Author)..... 76
Figure 4.26. Frame patterns: above and left bottom faculty of architecture facades, bottom security room facade (Produced by Author). 77
Figure 4.26. 27 Interior Design of the Security Room,1973 (Altuğ-Behruz Çinici). 78
Figure 4.28. Security Room,2022 (Produces by Author)..... 79
Figure 4.29. Gargoyle and Water Bowl 1963-1973, (Produced by Author)..... 80
Figure 4.30. Detail drawings of the gargoyle and water bowl, 1963-1973 (Altuğ-Behruz Çinici) 80
Figure 4.31. Gargoyles and water bowls from campus; faculty of architecture (Produced by Author)..... 81
Figure 4.32. Current situation of gargoyle and water bowl, 2022 (Produced by Author) 82
Figure 4.33. Refuge Lighting Element, current situation, top and front view (Produced by Author)..... 83
Figure 4.34. Refuge Lighting Element Details (Produced by Author). 83
Figure 4.35. Refuge Lighting Element Current Situation (Produced by Author)... 84

Figure 4.36. Pedestrian Walkway, Parapet and Vehicle Road (Produced by Author).....85
Figure 4.37. Defined areas, patterns and boarders of the floor covering, (Produced by Author).....86
Figure 4.38. Barrier system, 1969 (Altuğ, Behruz Çinici). 87
Figure 4.39. Section of paved pedestrian road (Produced by Author). 88
Figure 4.40. Overall view and details of pedestrian walkway, parapet and vehicle road (Produced by Author). 89
Figure 4.41. Concrete bollard light (Produced by Author).....90
Figure 4.42. The evolution of trees over time, 1950s, 1990s and 2020s. 91
Figure 4.43. Shadows of the trees on the textures of the Gate (Produced by Author). 92
Figure 4.44. Different geometries on campus (Produced by Author). 94
Figure 4.45. Different construction techniques of materials and material differences defines spaces, above faculty of architecture professor block and bottom professor room (Produced by Author).....95
Figure 4.46. Faculty of architecture professor entrance Volumetric Narrations (Produced by Author for the course “Modern Campus in 2020). 96
Figure 4.47. Gate A1 Volumetric Narrations (Produced by Author). 97
Figure 4.48. Section of professor entrance illustrates the plate narrations. The plates delineate the areas of activity at the gate (Produced by Author for the course “Modern Campus in 2020). 98
Figure 4.49. Section of Gate A1 illustrates the plate narrations. The plates delineate the areas of activity at the gate (Produced by Author). 99
Figure 4.50. Ornamentations emerged from *kernform,* brick wall in physics department building, west facade of faculty of architecture, professor room in facult of architecture (Produced by Author).....100
Figure 4.51. Architectural elements; bulbs, concrete seating unit, concrete water bowl, concrete gargoyle, concrete ashtrays, and seating unit. (Produced by Author). 101

Figure 4.52. Architectural elements; concrete seating units, concrete trash bin, lighting element, 2022 (Produced by Author)..... 102
Figure 4.53. Design of Gate A1, 1967 (Altuğ, Behruz Çinici, Güngör Özme). ... 103
Retrieved from https://archives.saltresearch.org/handle/123456789/133

CHAPTER 1

INTRODUCTION

This thesis is a part of the ongoing project entitled "Campus Utopias", which also focuses on one of the iconic examples of modern architecture in Ankara, Middle East Technical University (METU) Campus. The research is also an outcome of the graduate courses that are given in the architecture program. [1] Foundations of this thesis is formed by the study originated from these classes and the outputs of these courses. “The Campus Utopias” is a graduate design research course conducted in collaboration with TU Delft Faculty of Architecture and Built Environment, as a continuation of the conservation project started with the support of The Getty Foundation's Keeping It Modern Project (KIM).[2] Research projects of this studio supported the overarching strategy developed by the METU-KIM conservation team: "Conservation by documentation and raising international awareness." [3] The METU team investigated the original intentions of the architects in the design of the campus to help manage future conservation policies and developments. All research under this project aims to encompass many perspectives and issues capable of

[1] Namely Arch 524 Architecture and Different Modes of Representation, Arch 505 Advanced Architectural Design Research, and Arch 571 Directed Studies in Environmental Design. The graduate courses conducted by Prof.Dr. Ayşen Savaş particularly focused on this subject, between the years 2017- 2021 at METU Department of Architecture.

[2] The Getty Foundation supports organizations and individuals worldwide with a range of grants committed to advancing the better understanding and protection of the visual arts. Institute mainly has grant programs to support museums, art historical research, and the conservation of art and architecture. The "Keeping it Modern" grant, which was launched in 2014, is one of the grants given for the field of architecture. KIM project is an international initiative that focuses on the conservation of modern architecture from all over the world. Conservation and preservation of architecturally significant and valuable buildings of the 20th century by primarily expounding their values, threats, and challenges they might encounter, is the main focus of the project. The METU campus was included in the KIM project in 2017.For further information METU-KIM website: http://kimproject.arch.metu.edu.tr/

[3] Ayşen Savaş et al., “Research and Conservation Planning for The METU Faculty of Architecture Building Complex by Altuğ-Behruz Çinici Ankara, Turkey” (Ankara, 2020).

informing, representing, archiving, and rediscovering the values of the METU Campus.

This thesis is stemmed from this extensive research will accentuate the "architectural details" of the METU Campus. The campus is a ground of narrative and fertile details to be studied and discovered further, with individual levels of meaning contained in them, both physical and intellectual. The research aims to extend the understanding of the details of the campus, revealing the structural and material clues regarding the architects' intentions for the campus's first impression by analyzing its design, while focusing on how details function as representational architectural elements.[4]

The term "detail" in architectural literature originated in theoretical studies in France in the 18th century. It was associated with style and generally used synonymously. Over time, the term has acquired various connotations. With modernism, detail moved beyond the meaning of structural joint or solely ornament and became the extension of larger design decisions once again. Mies van der Rohe's "God is in the detail" adage unveils the detail captures the process of signification or the attachment of meaning to man-made architectural artefacts. Marco Frascari defines the details as *loci* where knowledge is of an order in which the intellect, that is, *logos*, finds its working. Details are more than subsidiary elements; they can be considered as the smallest units of signification in the architectural construction of meanings.[5] They are also the intermediary or immediate narrators of a building's structure and use. Considerably, detail can be defined as the structural arrangement of every component

[4] The theoretical base of this study was created by unfolding the key readings of the Arch 524 course. Including: Robin Evans, "Architectural Projection," in *Architecture and Its Image: Four Centuries of Architectural Representation: Works from the Collection of the Canadian Centre for Architecture* (Cambridge: The MIT Press, 1989), 19–35; Robin Evans, "Translations from Drawing to Building and Other Essays," in *Translations from Drawing to Building and Other Essays* (Cambridge: The MIT Press, 1997), 153–93; Sarah Goldhagen, "Something to Talk about: Modernism, Discourse, Style," *Journal of the Society of Architectural Historians*, no. 64 (2005): 144–67, https://doi.org/10.2307/25068142.

[5] Marco Frascari, "The Tell-the-Tale Detail," in *Theorizing a New Agenda for Architecture: An Anthology of ArchitecturalTheory*, ed. Kate Nesbitt, 2nd ed. (New York: Princeton Architectural Press, 1996), 500–514.

of a building. Detail is defined as a component that expounds and depicts the totality in which it is found. In light of the definitions of detail with modernism, detail reveals the architects' aims. They become the narration of the main design decisions and intentions.

In this research, the term “detail” is considered as a narrative element and an object of representation that articulates the whole it is in. Architectural detail is conceived as an architectural element that both constitute the whole and is formed by the whole. METU Campus becomes a unique case study the reveals the architectural detail’s representational role, and its relationship with the whole.

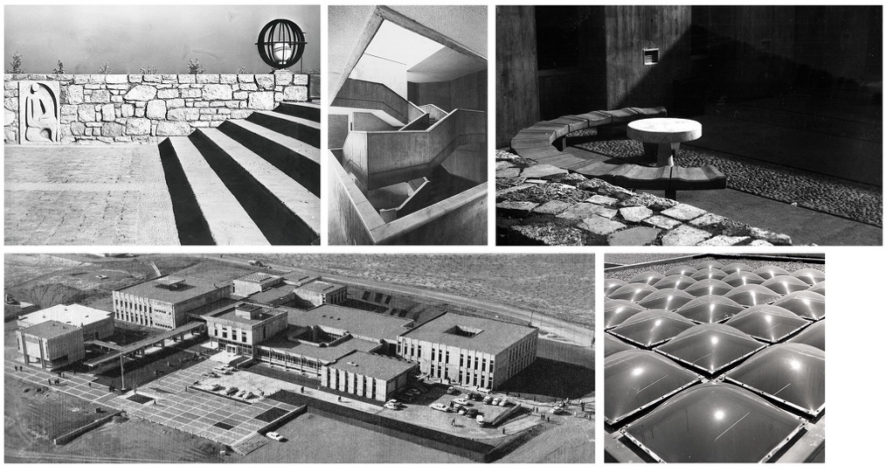


Figure 1.1. Different scale of the details that constitutes the METU campus.

1.1 The METU Campus

Lorem METU Campus, designed in the 1960s by architects Altuğ and Behruz Çinici, is a pioneering architectural and intellectual establishment in Turkey. Its outstanding modernist approach competed with other notable modernist structures around the world. It was promoted as a wonderful example embodying the "ideals of modernity"

in Turkish architecture, with its ambition of design attributes in diverse scales.[6] The campus was intended to be more of a school of thought than an educational institution. The campus itself was intended to be a model "modern" educational environment. The campus was planned with the goal of being a self-subsistent environment that enables learning from the campus.

With the development and expansion of the city over time, the campus is now located at a central point in the city. The expanding urban periphery, current infrastructure expectations, and ongoing ideological transformations have exposed the campus to various threats. In order to preserve this prominent modern architecture artefact, it is necessary to understand that it is a part of Ankara's urban memory and to explain the symbolic architectural values it embodies.

As a gated campus, METU establishes contact with the city via its gates. The gates are the only architectural components in the campus that have direct interaction with the city. The METU campus currently has ten gates. Gate A1 is the only one designed by the architects and built in tandem with the complex (Figure 1.2). It has been serving as the main gate to the campus since its completion. The gate constitutes an interface between the METU campus and the city, a *locus* where the campus and Ankara connect, engage, and interact. Due to this unique condition, Gate A1 is evaluated as a crucial object of representation. It can be defined as an artefact that has taken on the role of representing the campus directly to the city. With this aspect, this artefact distinguishes itself from the other architectural elements that constitute the campus. Therefore, in this study, architectural re-readings of the details will be conducted through Gate A1.

[6] Ayşen Savaş, "METU Campus," *Brownbook Magazine* 67 (2018): 71–85.

1.2 Aims and Objectives

In this study it is aimed to investigate the significance of the Middle East Technical University Campus as a prominent modern architecture artefact in Ankara, through its architectural details. Gate A1 will be contemplating as a part representing the whole. Examining the main entrance gate as an architectural detail will reveal the structural and material clues regarding the architects' intentions for the campus's first impression. It will also compile the readings for the first image designed for urban memory. The main objective of this research is to explore how the details represent the whole which they are in. In this context, this thesis focuses on determining how the METU Campus serves as a model for investigating narrative details. The METU campus embodies a design approach from which has specific rules for generating connectivity between parts and whole. As such, elements and parts indicating successful tectonic expression will be extracted from the subtle details of the METU campus.

1.3 Hypothesis and Methodology

To address the main question of this research, details of the METU campus are explained, and the relevant definitions of the detail are established. The main hypothesis of the research is that the METU campus is a successful whole that embodies narrative details as physical components among elements and patterns of interrelated cohesiveness. In the METU campus, each detail represents and construes the whole, while constituted by the whole.

This exploratory research will use visualization to analyze the details of the METU campus, resulting in an inventory of how the details constitute and represent the whole concurrently. The METU Campus' primary details, in particular Gate A1, structural, plastic, and surface qualities will be revealed through design research on its meticulously drawn plans, sections, façades, detail drawings, and research conducted *in situ*. To generate an understanding representative role of narrative

details that may be developed in the METU Campus as a “second-wave modernization project” in the newly established Turkish Republic, patterns of part and whole relations will be documented and defined according to the functional, representational, and constructor roles they initiate. This documentation will assist in introducing narrative details while understanding the artefact.

1.4 Outline of the Thesis

This thesis introduces four chapters to elaborate on the research made upon Gate A1 which is defined as a “representational artefact” and “detail.” The first chapter introduces the topic and provides a brief history of architectural detail and its emergence as a representational element with modernism. It continues by defining detail for this study and how the METU campus is considered as a detail and a whole together. Afterward, the significance of Gate A1 as a detail briefly described. Aims and objectives, hypothesis, and research methodology summarize the first chapter. The second chapter builds on the previous one by expanding the meaning of architectural detail as not only a term but also a representational architectural element. The gate is also mentioned briefly in this section as an architectural element and an architectural representation object. The third chapter focuses on the METU campus, the project's establishment, and the current political and social environment that influenced the architectural environment at the time the METU was founded. The factors that determine the physical and design decisions of the campus are mentioned. It will be discussed how these decisions serve as the foundation for the details. The fourth chapter unfolds Gate A1 as a detail, the relationships between different elements, parts, and details of it, as well as the representational role it accommodates while constituting a coherent and harmonious whole. The fifth chapter, which is the final one, summarizes the research and its outcomes.

CHAPTER 2

DETAIL AND GATE AS REPRESENTATIONAL ELEMENTS IN ARCHITECTURE

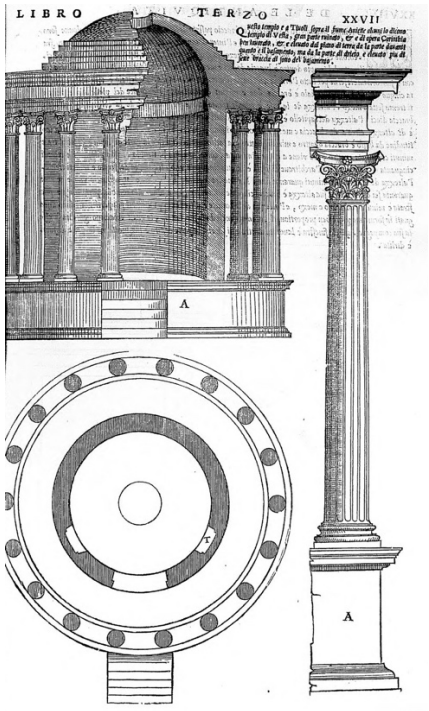
Within a specific limitation, this chapter will attempt to provide a general introduction to the meaning of detail in relation to architecture. Following that, the chapter will define the term detail as a narrative representational tool in architecture. The variety of perspectives on the architectural detail underlying this study will be explained. The chapter concludes with a brief explanation of a gate as an architectural element and then extends on to its representational role in architecture.

2.1 Detail

Detail is defined in the dictionary as "small part in relation to a larger whole".[7] This definition is insufficient to express the physical and abstract meaning of it in architecture. As a result, the definition of detail in architecture differs from the definition in the dictionary. Alberti's description best exemplifies the situation. A column, an architectural element is both a whole consisting of parts (capital, shaft, base) and a part of a whole, a temple in Alberti's case (Figure 2.1, Figure 2.2).[8] In other words, architectural details can be created at many different scales. If Alberti's column case is used as a guide, even though Gate A1 is viewed as a whole comprised of the details it contains in the METU case, it is a detail that constitutes the entire

[7] "https://www.Merriam-Webster.Com/Dictionary/Detail," n.d.
[8] Marco Frascari, "The Tell-the-Tale Detail," in *Semiotics 1981* (Springer, Boston, MA, 1981), https://doi.org/https://doi.org/10.1007/978-1-4615-9328-7_32.

campus. Relinquishing from the dictionary definition, in architecture, the meaning of the term "detail" has transformed since Alberti. Its meaning went beyond conventional definitions, and it has been described as a functional necessity and as a structural joint. It has been seen not as a necessity for the essence of the building to exist, but rather as an ornament, decoration, or structural joint. It has come to be regarded as an element that both forms and consists of the essence of the structure over time. In other words, it was deemed as a requirement for the structure's essence to exist. At the same time, it has served as an intermediary object representing the architect's intentions.[9]



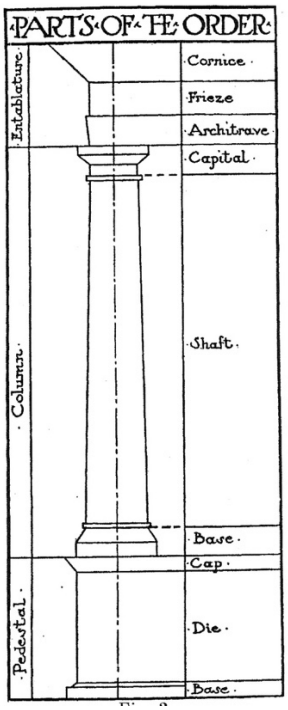


Figure 2.1. Column as a part, drawings of Vesta's Temple, Sebastiano Serlio.

Figure 2.2. Parts of a column according to order, author unknown.

[9] R.Ford Edward, *The Details of Modern Architecture, Volume 2* (MIT Press, 1996).

2.1.1 Emergence of the Term Detail in Architecture

In architectural literature, the term "detail" originated in theoretical studies in France in the 18th century and spread throughout Europe from there. The term's association with the concept of "style," as well as the active influence of French literary criticism and theory on French neoclassical architects, aided in its spread. In 1960, the 17th-century poet and critic Nicolas Boileau-Despréaux compared an over-detailed poem to an over-detailed palace and advocated against the use of unnecessary details in poems. As stated by Marco Frascari, this analogy was widely used in architecture until the 18th century, when Giovanni Batista Piranesi argued that Boileau's theory was negligible, citing Montesquieu.[10] The role of detail in architectural production is officially consolidated in literature also by French theorists. Architectural details were evaluated as words in a sentence. The assortment of words "the details" is the choice of the style and gives character to the sentence "the whole structure."[11] French theorists of the *architecture parlante* formalized the function of detail in architectural creation in the analogy of "speaking architecture". Architectural details are viewed as words that compose a language, just as the choice of words and style defines the personality of a statement, the choice of details and style defines the identity of a building. This powerful role of detail as a generator of a building's character was highlighted by the 18th-century British architect John Soan:

> "Too much attention cannot be given to produce a distinct character in every building, not only in great features but also in minor detail; even a moulding, however diminutive, contributes to increase or decrease the character of the assemblage of which it forms a part."[12]

---

[10] Frascari, "The Tell-the-Tale Detail," 1996.p.502
[11] Ibid.
[12] "Lecture XI," in *Sir John Soane: The Royal Academy Lectures* (Cambridge University Press, 2000), 239–59, https://doi.org/10.1017/9780511613135.013.

Detail is also considered as a generator that constructs the character of the building in the Beaux-Arts tradition in France during the nineteenth century. In this tradition, *analytique* drawings have been created as a graphical tool for examining "the detail" (Figure 2.3, Figure 2.4). These drawings are defined as a graphical representation of a studied or designed architectural artefact. The '*analytique*' was prevalent as an instructional project in the late nineteenth and early twentieth centuries, at the height of the Ecole des Beaux Arts' influence on architecture. *Analytiques* were pursued by students in ateliers and judged by Beaux-Arts architectural design practitioners. The term *analytique* or order problem refers to the end result of a research and drawing process: a carefully composed and inked solution emphasizing the relationship of parts to the whole and details to overall proportions.[13] Details possessed an important place in the *analytique* drawings. They were created at various scales to reveal the relationship between the components that comprise the whole. To emphasize an important point, the entire structure was also depicted on a small scale as one of many details.

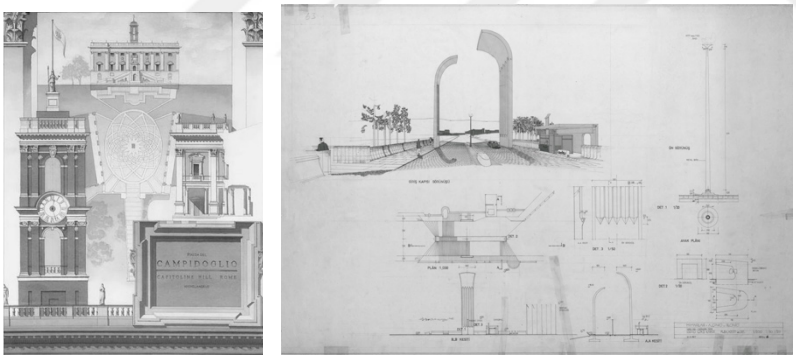


Figure 2.3. Details among details, an example of *analytique*, Campidoglio, Rome.

Figure 2.4. Concept drawing of the METU campus Gate A1, Altuğ and Behruz Çinici, 1967.

[13] John Frederick Harbeson, *He Study of Architectural Design: With Special Reference to the Program of the Beaux-Arts Institute of Design* (New York: The Pencil Points Press Inc., 1926).p.7-24.

According to Marco Frascari, the origins of *analytique* and its significance in architectural interpretation can be traced back to Piranesi's visual representation and composition approach in his engravings examining the glory of Roman Architecture.[14] As a graphical examination of structures, *analytique* developed during a period when the drawings did not require to describe the way of the of construction of the details. Detail drawings were superfluous during that time since distinct details were made by different craftsmen who were skilled in a specific one. The structure and its details were built directly by the craftsmen, so the drawings included rare detail information and measurements. Before the industrial revolution, the production of materials and details was limited to local materials and solutions because of transportation difficulties and the locality of the craftsmen. The industrial revolution brought innovation with many changes and new materials emerged. Essentially, steel and concrete broadened abruptly the material palette of the architects. With the development and transformation of the industry and materials, the old methods in the production of details have become problematic. Since the old methods of producing details were created afore industrialization, they cannot afford the changing and developing new society.[15] Thus, the production and the meaning of the details were reconsidered. As a result of it, there have been changes occurred in the production of the detail.

> "We can start a new architecture using the tools and knowledge that our time has given us, without traditions that are no longer obsolete today. Material for each function; its own form and ornament for each material." [16]

The revolution of science, technique, and industry brought a new system of thought in architecture. Also, a new system of thought emerged within the details. Louis

---

[14] Frascari, "The Tell-the-Tale Detail," 1996.p.502
[15] Kenneth Frampton, *Modern Architecture A Critical History*, Fourth (London: Thames and Hudson, 1980). P29-40.
[16] Eugéne Emmanuel Viollet-le-Duc, *Discourses on Architecture*, ed. Henry Van Brunt (Boston: James R. Osgood and Company, 1875).

Sullivan's idea that "form follows function" emphasizes the importance of simplicity in modern architecture and forms the foundation of modern architectural thought. A more rational architectural *tropes* of details based on modern life have emerged.[17] Although the “speaking architecture analogy” continues, the details are no longer additional or spare things but things that emerge from the material from the way the building is made from itself, *kernform*. With this architectural style, which consists of steel glass and unadorned concrete, it is much more geometric and simplified; the only ornamentation being the building itself.

After World War I, the 1920s was a period of *utopia*.[18] In this period, the subjects, materials, and technology of the time were vastly different from the previous period. With the industrial revolution, not only did different building needs such as airports, and hangars emerge, but building materials and styles have also evolved. Architects began experimenting with new techniques and materials, giving them greater design freedom. Because of the possibilities provided by new materials and structural methods, a new architecture that would respond to the needs of a constantly urbanizing society became both necessary and possible. Modern architecture, which tended to rationalize and industrialize with a new ideology, would adopt new design searches instead of replicating historical forms. Indubitably, this led to the emergence of a new understanding of detail. Detail demonstrates the properties of materials through the use of construction; it enables design decisions articulate. In suggesting a relationship between part and whole, the detail also raises the issue of hierarchy.

---

[17] Sarah Goldhagen, “Something to Talk about: Modernism, Discourse, Style,” *Journal of the Society of Architectural Historians*, no. 64 (2005): 144–67, https://doi.org/10.2307/25068142.
[18] Frampton, *Modern Architecture A Critical History*.

2.1.2 Architectural Detail as a *Loci*

> "The detail expresses the process of signification; that is, the attaching of meanings to man-produced objects. The details are then the loci where knowledge is of an order in which the mind finds its own working, that is, logos."[19]

With modernism details became much more than subordinate elements once again. They are the smallest signification units in the architectural structure of meaning, manifest themselves as spatial cells or compositional elements, modules or dimensions, the transition between solid and void, or the relationship between interior and exterior. Considering its dual role in uniting the tangible and intangible, the concept of detail as a minimal unit of production is more meaningful.[20] Architecture's 'construction' and 'construing' are both in the details. The architectural detail, which is elusive in a traditional dimensional definition, can be defined as the union of construction, the result of "*logos of techne*", with construing, the result of the "*techne of logos*." This statement reveals a duality that exists at the smallest scale of the built environment. "*Logos of techne*" can be translated as the logic of making or the *locus* of assembly and fabrication. "*Techne of logos*" can be translated as the creation of logic or the understanding of space. Because it is the sum of a space's expressed details, and it is the source of users' understanding and experience of that space. If an architect alters the set of details, it may be altered how the same medium is read by those who occupy or move through it.

[19] Frascari, "The Tell-the-Tale Detail."p.500.
[20] Ibid.500.

2.1.3 Architectural Detail as Narrative Element

> "Whatever the air spaces, areas, and dimensions involved, it is the precise study and good execution of details that confirm architectural greatness. The detail tells the tale."[21]

The detail gained a new meaning with modernism, especially with the following definitions developed by Colin Rowe and Kenneth Frampton in their critical histories. Rowe introduced "the idea of speaking detail"[22] and Frampton stated that "detail as the didactic crafts of the architect."[23] In light of these definitions, it is made clear that detail gives information about the architects' intentions. Details become the extension of larger design decisions. As microcosms of the larger unity, details tell the story of their making, placing, and dimensioning.[24]

"Details express what the basic idea of the design requires at the relevant point in the object: belonging or separation, tension or lightness, friction, solidity, fragility… Details, when they are successful, are not mere decoration... They lead to an understanding of the whole of which they are an inherent part."[25]

Architectural theorist Marco Frascari defined architectural detail as more than a subordinate element or a mere joint. He claims that "[e]ach detail tells the story of its making it placing and its dimensioning." Details reveal material properties through construction application and clearly articulate design decisions. Detail reveals the issue of hierarchy and suggests the relationship between part and whole.

---

[21] Jean Labatut, "An Approach to Architectural Composition," *Journal of Architectural Education* 11, no. 2 (n.d.): 33–37, https://doi.org/https://doi.org/10.2307/1423963. p.37.
[22] Colin Rowe, *The Mathematics of the Ideal Villa and Other Essays* (Cambridge (MA): The MIT Press, 1976):189.
[23] Kenneth Frampton, *A Critical History Modern Architecture*, Fourth (London: Thames and Hudson, 2018).
[24] Le Corbusier, *The Decorative Art of Today*, ed. James I. Dunett (London: The Architectural Press, 1925).
[25] Lars Muller, *Peter Zumthor: Thinking Architecture*, First (Baden: Lars Muller Publishers, 1998):16.

The process of signification is narrated in detail. Furthermore, details are both indirect and direct expressions of the building's and the buildings' use. The example of representational *analytique* drawings provided in the article "The tale the Tale Detail" completely reveals the detail as a narrative element. Precise research and execution of details disclose all of an artifact's meaning and structural construction.[26]

Marco Frascari also set an analogy between the creative use of details and the creative use of language. The precise meaning, that is, the function of words, would be revealed only through subsequent use. Re-presentation, or re-use, clarifies the function of detail in a design. The reuse of detail becomes a creative catalyst by unifying function and representation. It develops into a *fertile detail.* [27] Fertile details are structural devices that are used to build architectural text from within.

Edward R. Ford put forth *articulated detail*. Articulated details solve the constructional problems with visible results inside or outside. However, the most important feature of the narrative aspect of articulated detail is that they narrate some characteristics of the assembly of the building, which inform observers about the construction of the building, and how we perceive the relationship between the building from the part to the whole. According to Ford, understanding a building, not just depending on the articulated parts. It also requires an understanding of the relationship between them. [28]

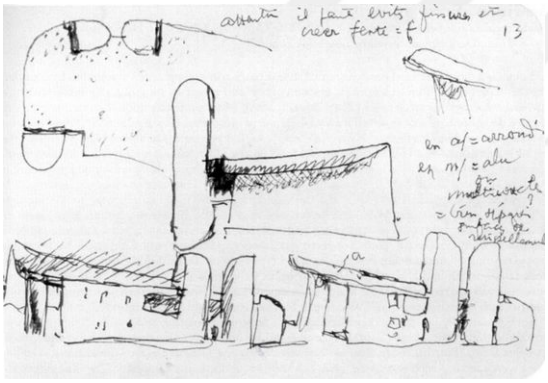
While revealing the meaning of detail in modern architecture, this study will benefit from mentioning Le Corbusier, one of the pioneers of detail in modern architecture. The following adage of Corbusier reveals his approach to detail: "In nature, the smallest cell determines the validity, the health of the whole."[29] He asserts that nature's cellular structures are repeated on both small and large scales throughout the

---

[26] Frascari, "The Tell-the-Tale Detail," 1996.p.500.
[27] Ludwig Wittgenstein's understanding of the creative use of language.
[28] Edward Ford, "The Grand Work of Fiction: The Detail as Narrative," *Architectural Design* 84, no. 4 (July 2014): 26–35, https://doi.org/10.1002/ad.1778.
[29] R.Ford Edward, *The Details of Modern Architecture, Volume 1* (The MIT Press, 1990).p.241.

universe. With this way of thinking, Corbusier developed detailing systems that reproduced the organizational ideas of the buildings on a small scale. With the following statement "everything is arranged according to principles compatible with the whole," the architect stated that each architectural detail contributes to the overall meaning. Through Corbusier's architecture, William Curtis asserts that "detailing and finish are integral with the overall forms and guiding ideas of the design."[30]

The narrative role of the detail is also revealed by Le Corbusier by expressing that furniture, walls, and openings, are all details "speaking" to the inhabitants of the space. The details of Le Corbusier not only express his organizational ideas but also reveal his philosophies. This philosophy goes beyond the frame of architecture, his perspective on the entirety of existence. In other words, for Corbusier, detail has turned into an object of representation that reflects his ideals and dreams (Figure 2.5, Figure 2.6).



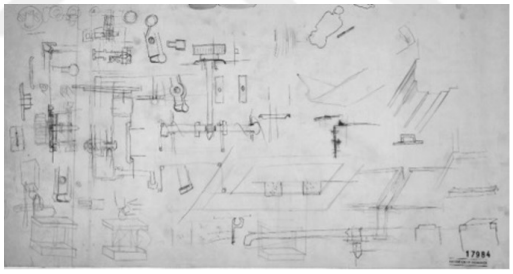


Figure 2.5. Corbusier's sketches for Rodchamp Chapel.

Figure 2.6. Corbusier's subtly drawn detail drawings for window mechanisms, door latches, skylights, lamps, and fittings. Drawings are full of the record of struggle to make these details work.

[30] Eduard F Sekler and William Curtis, *Le Corbusier at Work: The Genesis of the Carpenter Center for Visual Arts* (Cambridge (MA): Harvard University Press, 1978).p.21.

2.1.4 Architectural Detail as Tectonic Expression

Dictionary definitions of the tectonic word are "the science or art of construction, both in use and in artistic design," as well as "the art and process of producing practical and aesthetically pleasing buildings." The term "tectonic" refers not only to the activity of creating a materially necessary structure that meets specific needs but also to the activity of elevating this structure to the level of an art form.[31] The term tectonic has been used in the English glossary since 1656, implying “belong to the building,” and it was first and extensively discussed as a modern architectural meaning in Karl Bötticher’s *Die Tektonik der Hellenen* (1843-1852) and Gottfried Semper’s The Four Elements of Architecture (1851). [32]

Karl Bötticher’s *kernform* and *kunstform* assert how tradition defines tectonics through a dichotomy of structural core and meaningful representation. Bötticher proposed two elements as key points of tectonics: *kernform* and *kunstform*. Tectonics, according to Bötticher, is a construction activity that includes *kernform* (core-form) and *kunstform* (art-form). Bötticher demonstrates that the *kernform* of each part is the mechanically necessary and statically functional structure; the *kunstform*, on the other hand, is simply the characterization that makes the mechanical-statical function visible. [33]

Semper claims that ornaments are not implemented later and cannot be deducted from the artefact because the body serves as both the ornament and the structure. “The parts of an architectural work of art can be explained as material parts of a construction not only by their real or symbolic significance,” he argued.

---

[31] Stanford Anderson, “Modern Architecture and Industry: Peter Behrens, the AGE, and Industrial Design.,” *Opposition* 21, no. Summer 1980 (1980): 79–97.p.83.
[32] Kenneth Frampton, *Studies in Tectonic Culture The Poetics of Construction in Nineteenth and Twentieth Century Architecture*, ed. John Cava (MIT Press, 1995).
[33] Wolfgang Herrmann, *Gottfried Semper: In Search of Architecture* (Cambridge: MIT Press, 1984).

According to Semper, the artistic or ideal aspect of tectonics was neither added from the outside nor limited to independently ornamental objects.

Gevork Hartoonian believed in the higher-level structural aspects of tectonics and interpreted tectonic as “the logos of making” in terms of tectonic qualities beyond mechanical structure. According to Hartoonian, "in the tectonic, column, wall beam, and roof transcend structural rationality and reveal meaning." By analogy, tectonics responds to structural forces. Tectonics also uses ornamentation to highlight structural forces. Similarly, Kenneth Frampton proposed that the term denotes not only structural and material integrity but also poetic construction. Frampton regarded "the structural unit as the irreducible essence of the architectural form" in tectonic theory. Beyond the technical and mechanical logics of the artifact, Frampton considered the poetic representation of tectonic.

Tectonic terms are strongly associated with *techné* (technique, and technology), construction and construction terms; and stereotomy terms. These three types of tectonic concepts are related by their etymology, system, and material structure. The concept of tectonic refers to the “art of framing" in which linear elements are connected by joints and covered or filled with lightweight material, based on its etymology, system, and material structure. Thus, the "art of framing" as a tectonic concept reveals the following characteristics: To begin, tectonic etymology refers to craftsmanship. As a result, tectonic is based on framing construction rather than masonry construction. Second, tectonics refers to a higher level of construction rather than mechanical construction. Furthermore, it incorporates both the poetic aspect of *techné* and rational aspects of technology. Third, because of the organic, dual tectonic framework and the materials that form or fill the crust, the tectonic body serves as both ornament and structure. Framing is an art form based on material construction rather than structural or decorative form. [34]

---

[34] Ran Soo Kim, “A Study on the Definition of the Term ‘Tectonics’ in Architecture,” *ARCHITECTURAL RESEARCH* 8, no. December (2006): 17–26.p.17

The meaning of a system is defined by terms such as tectonic, construction, and structure. The terms "Structure, Construction, and Tectonics" are distinct, but they are closely related. Sekler defines construction as the physical manifestation of a principle or system based on material selection and application. The structure is a broader and more abstract concept that refers to a system or principle based on the arrangement of forces. According to Sekler, another term referring to certain expressive qualities in relation to the interaction of forces cannot yet be defined solely in terms of construction and structure. The term he is referring to is "tectonic."[35]

Adrian Forty, on the other hand, defined construction as the daily practice of constructing by contrasting it with structure, which he classified into three meanings based on historical architectural discourses. Until the mid-nineteenth century, structure, according to Forty, meant "any building in its entirety."[36] It meant "that keeps the abstract notions of support and assumed "stability" of a building independent of the actual building from its other elements, such as its decoration, cladding, or services" in the second half of the nineteenth century. In the twentieth century, Forty stated that structure implies an invisible and understandable scheme, which is often defined by the arrangement of tectonic parts. According to Forty, modernists who used the term structure confused the second meaning (a building's support system) with the third meaning (the clear diagram of the relationship between the parts).[37] Although Sekler considers the structure to be a combination of Forty's second and third definitions, Sekler and Forty evaluate the term tectonic differently and base their assessments on material facts. While Sekler defined tectonics as the representational qualities of forces and the arrangement of parts outside of the concept of a technical system, Forty considered tectonics to be

[35] Kim.p.25.
[36] Adrian Forty, *Words and Buildings: A Vocabulary of Modern Architecture* (New York: Thames and Hudson, 2004).
[37] Ibid.

synonymous with mechanics. Forty also defined tectonic structure as a "support system independent of material substance."

In this study, the reference reading that allows considering the detail as a tectonic expression is "Studies in tectonic culture: The poetics of construction in nineteenth and twentieth-century architecture" of Kenneth Frampton. The tectonic object appears in two forms, these modes called ontological and representational tectonic by Frampton.[38] Architectural detail is a tectonic expression that capable of enhancing the sensual and intellectual experience of the building. To reveal this, Frampton studies on Carlo Scarpa's comprehensive joint in the ninth chapter. In this chapter, Frampton reveals Scarpa's works' emphasis on articulation and the particular use of montage as a strategy for integrating heterogeneous elements. Scarpa treated the detail as a type of "tectonic condensation" and designed the joint as a point of intersection that embodies the whole in the part, whether it's a joint or a larger component like a stair, ladder, or bridge.

Going back to the origins of the debate, in this study, the details will be discussed as originating from *kernform* and assuming that *kernform* and *kunstform* merged with modernism. It will be hypothesized that the details are derived from *kernform*, both functionally and decoratively. Architectural detail will also be considered as a tectonic expression that can enhance the building's sensual and intellectual experience.

2.1.5 As a Context for Narrative Details: The METU Campus

The METU Campus becomes a unique case that embodies narrative details. The campus contains examples of fertile, articulated, speaking, and narrative details that are structured with modernism. This study is also aimed to document that the above-

[38] Frampton, *Studies in Tectonic Culture The Poetics of Construction in Nineteenth and Twentieth Century Architecture*.

mentioned details are repeated for certain functions and purposes in other parts of the campus. There is a great deal to be learned by examining the campus's parts in their own details. Detailing systems have been developed that reproduce the campus's own organizational ideas on a small scale. Not only do details express the organizational ideas, but they also express architects' philosophies which encompassed not just buildings, but the view of the entirety of aim of the METU project which's main aim was to create a visionary and modernist community.

2.2 Gate

The concept of the gate has developed in parallel with the concept of space. One of the first things needed and thought in architectural formation was the gate and the entrance. Gates and entrance spaces represent an essential architectural role in the designed space. The morphology of the gates varies depending on the overall quality. Gates and entrances are important identification symbols in this regard. The first ideas for that structure come from the gates. Without going inside, buildings built for a specific function indicate these functions from the outside with architectural elements. In addition to being a structural element of the interior, the gate also belongs to the exterior. While it carries the identity of the whole to the outside, it creates a whole together. The gates provide this indispensable relationship between inside and outside. As here, entrances and gates are always separating, on the contrary, they are unifying and integrative when considered. The gate is not only a detail that affects the overall identity of the whole but also constitutes it. The placement of the gate in the overall design, its form, and style, its ornamentations, and briefly the details have a direct impact on the overall design. Its dimensions, material finishings, patterns, construction ways, and purposes all have different meanings. Beyond being an architectural element, the gate is also a representation artefact.

2.2.1 Gate as a Representational Artefact

Entrance spaces, which were initially only a natural hollow and a tear, have evolved over time in accordance with people's preferences and needs, as well as the provision of social security. In prehistoric and Mesopotamian cultures, animal skins and textile products were used as covering material; the continued emergence and use of rigid doors coincided with the emergence of monumental structures, and more often with the use of stone or bronze. The origins of the gate idea date back to the dates people first began to inhabit. As an early example of a gate, animal skin was used to cover the entrances to caves and, later, primitive huts. Various gate creations have evolved over time. Mentioning them briefly, in Çatalhöyük, an important Neolithic age settlement, the gates of the houses are located as openings on roofs for safety concerns. At the end of the Neolithic Period, houses were built with gates connected by leather straps rotating around a mile, and seals were used as locks on gates. During the Chalcolithic Period, the location of the gate placed on the structure evolved. The rectangular planned houses in the Hacılar Settlement were entered through the gates on the facades. Stone gates in the shape of circles open and close by turning in Cappadocia's underground cities as well. Gates have emerged as a result of a need and have been assigned different meanings over time.

Gates have a representational meaning and architectural image as well as their functional duty. In other words, the gate has always been a source of contention in architecture. The concept of a gate can be traced back to ancient civilizations such as Egypt and Mesopotamia. The gates are regarded as portals with special and ceremonial significance.[39] The gates of important places in Ancient Egypt were meticulously designed since they were thought to be portals to another world. As a

[39] Johannes Haubold, *Greece and Mesopotamia* (Cambridge University Press, 2013), https://doi.org/10.1017/CBO9780511863240.

result of this belief, the "false door" application was common in religious buildings and tomb structures.[40]

Greeks, Etruscans, and Romans used single and double-leaf doors. The material and size of these gates were used to give information about the structure's function and occupant. Household doors are made of wood, while religious and monumental buildings have bronze doors. Greek temple portals were frequently adorned with cast bronze grilles. The "false door" application is also seen as a description of the wall painting of Roman civilization. Door depictions in Roman house wall paintings were used as an interior decoration element. Copper and its alloys were the most commonly used materials for gates in medieval architecture. The usage of materials, ornamentations, and technical features of Medieval Period gates can be observed in the bronze gates of the Hagia Sophia and Florence Cathedral. The symbols on the gates were significant during this period. The motifs and seals on the gate represented dignity, prestige, status, and wealth. The materials used in the construction of doors in the Middle Ages were carried over into the Renaissance Period. In the Renaissance, sculptors working on bronze sculpture used door panels to create elaborate designs. There are few differences in materials and techniques used on doors from the Renaissance to the nineteenth century. The decorative features of the art movements they belong to, such as Baroque, Rococo, and Neoclassical, influence the changes seen. Changes in the design of gates began in the nineteenth century. When steam power and industrialization became drastic, the technical and representational features of the gate began to change as well.

When the material physical reality of the door is left aside and its representational meaning is taken into account, the gate appears as a symbolic element. Gates have a representational meaning as well as their architectural image. In time, the gates have turned into an object that represents and gives information about the structure of

---

[40] Henri Frankfort, "The Origin of Monumental Architecture in Egypt," *He American Journal of Semitic Languages and Literatures* 58, no. 4 (1941): 329–58.

which it is a part, about the owners, its function, and its interiors. Briefly, gates emerged due to a need and turned into representational artefacts in time. They commonly gained these representational features from the associations provided by the formal elements that constitute it, for example, added ornaments, handles, and the size of itself.

Gate is also used as an object of representation and metaphor in literature and fine arts. The representational power of the gate in painting reached its peak in Italian medieval paintings.[41] In these paintings, the gate goes beyond being an element that provides the transition through the fortification that protects the cities. They became elements that contain abstract connotations describing a city, a war, or a divine event.[42]

In modernism, the gate continued to serve as a representational object in a different manner. Without the need for additional ornaments, the gate itself has become an object of representation. The gate forms the whole it is in, and the whole forms the gate, it is an intertwined relationship. The gate and the whole, both involve traces of each other. Gate had become an inseparable part that constitute the whole it was in. A definitive example of this can be the production of the gate by non-gate elements (Figure 2.7). Along with this, the emergence of the gate from the hierarchy can be given as an example (Figure 2.8, Figure 2.9)

In modern architecture, the gate is an element that is considered as a detail. While fulfilling a function, gates also serve the whole aesthetically (Figure 2.9, Figure 2.10, Figure 2.11). They constitute the whole and represent it. While doing this, gates benefit from the way they are constructed and formed and the structural details they

---

[41] Felicity Ratté, "NoArchitectural Invitations: Images of City Gates in Medieval Italian Painting," *Gesta* 38, no. 2 (1999): 142–53, https://www.jstor.org/stable/767186.
[42] Marta Lorenzon, "FROM ARCHITECTURAL ANALYSIS TO ARCHITECTURAL THEORY City Gates as Public Spaces in Syro-Anatolian Urban Centers," *Journal of Eastern Mediterranean Archaeology and Heritage Studies* 9, no. 3 (2021): 225–46, https://doi.org/https://doi.org/10.5325/jeasmedarcherstu.9.3.0225.

contain. Likewise, they are shaped by the whole of which they are assigned as a detail.

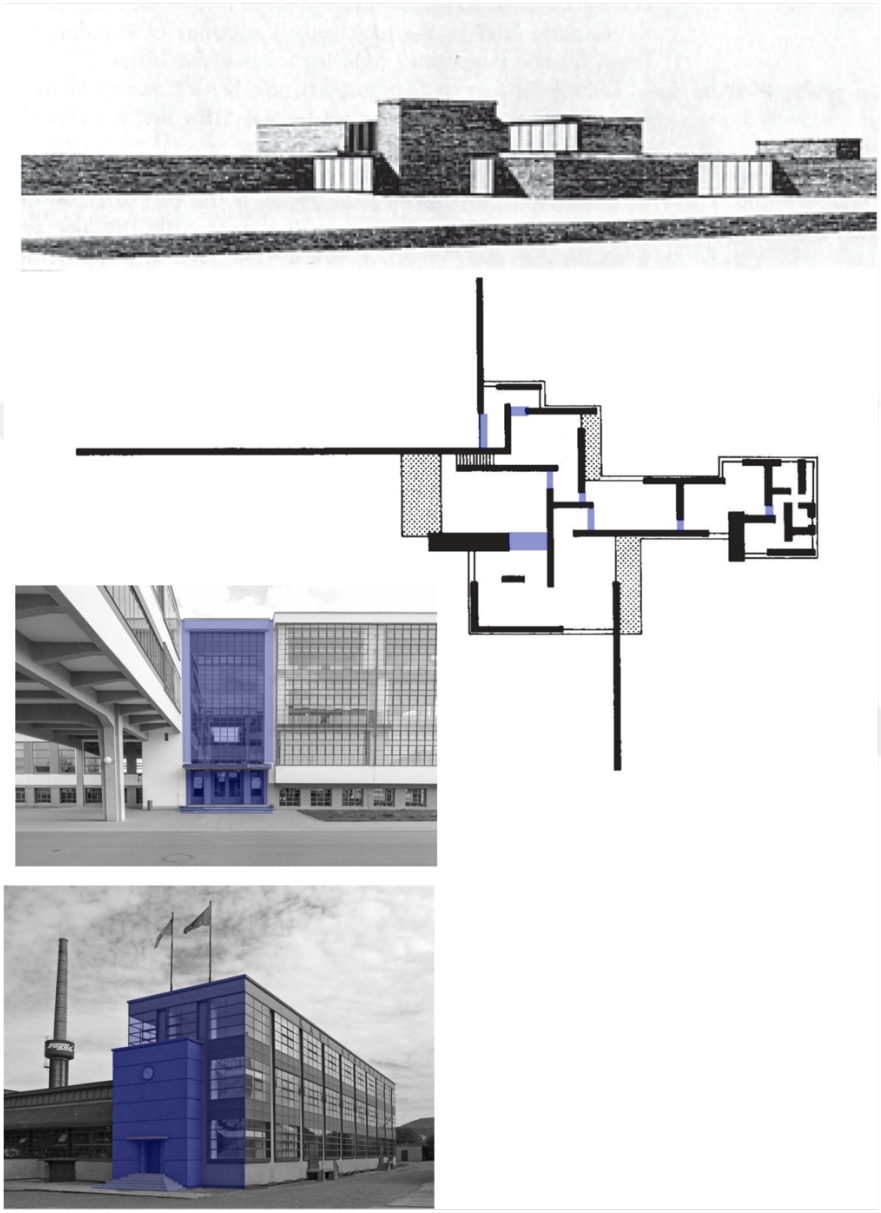


Figure 2.7. Brick country house interior gates, Mies van der Rohe, 1923.

Figure 2.8. Entrance gate of Bauhaus building Dessau, Walter Gropius, 1925-1926.

Figure 2.9. Enrance gate of Fagus Factory Alfeld, Walter Gropius and Adolf Meyer, 1924.



Figure 2.10. Aero Saarinen with his gate sketches and gateway model, 1965.

Figure 2.11. Enrance gate of Rodchamp Chapel from exterior, Le Corbusier.

Figure 2.12. Enrance gate of Rodchamp Chapel from interior, Le Corbusier.

2.2.2 Gates of the METU Campus

The campus gates have been given special consideration in terms of design and monumentality. They have a symbolic meaning in that a "gate" is an entrance into a new world, which is frequently associated with a new/different life. When viewed from the outside, a gate point to openness is inviting and provides a passage to the unknown inside, whereas when viewed from the inside, the concept is associated



Figure 2.13. METU Gate A1, 2011.

with enclosure and division. This is consistent with the university's ideology, which was to create a visionary community that was both isolated from and visible to the city as an inspirational establishment. The campus gates are a rendering of observable invisibility. The attention to detail and effort put into the design of the main gate provides an immediate sense of the architectural values one will encounter upon entering the campus (Figure 2.12).

CHAPTER 3

AN UTOPIA: THE METU PROJECT*

The METU Campus, designed in the 1960s by architects Altug and Behruz Cinici, is a remarkable architectural and intellectual establishment in Turkey. Its modernist approach competed with other iconic modernist structures around the world. With its highest examples of design qualities in different scales, it was presented as a great example representing the ideals of modernity in the newly established republic's architecture. It is necessary to comprehend how the METU project was envisioned and developed in order to fully understand the campus' design decisions and the foundations of the architectural details. Understanding the historical and political environment in which the university was founded is essential. This chapter is intended to provide brief information about it.

3.1 Middle East Technical University

The METU campus is one of the second-wave modernization projects in Turkey in the half of the 1950s.[43] After the Second World War, Turkish modernism was generally associated with social utopias. In this context, the METU project has been a product of Turkey's desire for social and ideological modernization. Domestication of the “barren land” was an important tool for the modernist ideology of the new state. Urbanism was the common ground for framing the norms and standards of public life.[44] Therefore, in the early years of the republic, a serious emphasis was

*Title created with the reference to the definition used by Ayşen Savaş and Arif Güven Sargın in “A University Is a Society: An Environmental History of the METU Campus.”

[43] Ayşen Sargın Savaş and Arif Güven Sargın, “A University Is a Society: An Environmental History of the METU Campus,” *The Journal of Architecture*, no. 21 (2016): 602–29.

[44] Frampton, *Modern Architecture A Critical History*.

placed on environmental and city projects. Another area that was as important as these projects was education-based. [45] The new capital city Ankara would be the leading city where all these new projects would be implemented and would set an instance for the new Turkey. As a result of this ideal, Ankara would become "the representation of modernism" in the early years.[46] Over the years, the METU campus and the university's education program would become the example that best served this purpose. It also became an outstanding example of modern architecture and modernization projects of the new republic in Ankara.

3.2 Modern Architecture in Turkey

Although Turkey is viewed among third-world countries, it has a different position due to its close political and socio-economic relations with Europe and America.[47] In this context, notably in the post-war period, Turkey was close to western countries in the praxis of modern architecture. The first modern architectural attempts were revealed after the establishment of the Republic of Turkey in 1923.

The first architects of the republic were those who started their architectural education in the new republic and were raised in this environment and with contemporary influences. Although the young Turkish Architects were very few in number in the first years of the republic, their number increased as they began influential in the development of Turkish architecture. Afife Batur mentions the architects of the newly established republic with the following statement: "Young Turkish architects welcomed modernism with great enthusiasm and remarkable

[45] Ayşen Savaş and Et Al., "The Conservation Plan for METU," n.d., http://www.getty.edu/foundation/initiatives/current/keeping_it_modern/report_library/metu.html.
[46] Sargın Savaş and Sargın, "A University Is a Society: An Environmental History of the METU Campus." p.81
[47] Dufang Lu, ed., *Third World Modernism Architecture, Development and Identity* (Routledge, 2011). p.7.

disposition"[48] The year 1933 can be considered an important turning point for the "young Turkish architects" of the new republic, due to their achievements in international competitions. The period of proving Turkish architects' competence in new architecture has begun. These achievements became the voice of the professional legitimacy struggles of Turkish architects and revealed that they were as competent as, or even better than their foreign masters and colleagues.[49] This unfolded that the buildings designed in this period abandoned the historical understanding of the First National Architecture movement and started to cherish the International Style. The construction of the newly established republic's public buildings had an important influence on this occasion.

In line with the development plan of the Republic, the main priorities were the construction of service/public buildings and industrial structures throughout the country, as well as the construction of hospitals and educational buildings. The design of public buildings with architectural competitions started in the 1930s. Train stations emerged as the first modern buildings in Anatolia. The factories constructed between 1934 and 1939 became a representation of modern architecture, as their forms developed according to functionality and mandatory space organization.[50] Modern houses were completely different from traditional Turkish houses in terms of planning, openings, mass-volume, and facade designs.[51]

According to Sedat Eldem the national architectural style, which was influential between the years 1935 and 1950, was replaced in favor of the International Style,

---

[48] Afife Batur, "To Be Modern: Search for a Republican Architecture," in *Modern Turkish Architecture*, ed. Renata Holod, Ahmet Evin, and Süha Özkan (Ankara: Chamber of Architects of Turkey, 2005), 69–96.
[49] Sibel Bozdoğan, *Modernism and Nation Building: Turkish Architectural Culture in the Early Republic (Studies in Modernity and National Identity)* (Publisher University of Washington Press, 2002).
[50] Metin Sözen and Mete Tapan, *50 Yılın Türk Mimarisi* (Istanbul: Türkiye İş Bankası Kültür Yayınları, 1973).
[51] Rana Karasozen, "Early Period of Modern Architecture in Turkey – A Case Study of Eskisehir," *IOP Conference Series: Materials Science and Engineering* 245 (October 2017): 052045, https://doi.org/10.1088/1757-899X/245/5/052045.

between 1950 and 1955.[52] The prevalence of the "International Style", which spread from America and emphasized the concepts of liberalism, democracy, and modernity, was also reflected in the architectural competitions organized in the 1950s, in Turkey.[53] In the 1940s, Turkish governments organized several national and international competitions. These numbers continued to increase in the 1950s.[54] One of the architectural competitions, which was very influential in Turkey in the 1960s, was held for the Middle East Technical University Campus design.

3.3 Establishment of METU

Along with the changes that resulted from the Second World War, the need for urbanization arose with uncontrollable migration from villages to cities in Turkey. North America and Europe were influential in this regard with their international post-war policies of all scales. One of these was the METU project, which aimed to establish an urban research institute for the entire region. During the post-war period, Turkey became a member of the United Nations in 1950 and NATO in 1952. After these memberships, “American inflection of modernization” began to appear in Turkey's sociopolitical climate and architecture. Ayşen Savaş says that “Modernism via America assertive theoretical tool that allows an understanding of the METU Project.”[55] As in architecture, METU would adopt the post-war educational paradigms of Europe and North America. With the agreement signed between the United Nations and the Republic of Turkey in 1951, Charles Abrams was authorized to conduct research on housing and urban planning in Turkey. As a result of his research, Abrams proposed the establishment of the Graduate School for

[52] Sedat Hakkı Eldem, *Türk Mimari Eserleri* (Istanbul: Yapı Kredi Yayınları, 1974).
[53] H R Hitchcock and Philip Johnson, *Modern Architecture : International Exhibition, New York, Feb. 10 to March 23, 1932, Museum of Modern Art* (New York: The Museum of Modern Art, 1932).
[54] Meltem Gürel, ed., *Mid-Century Modernism in Turkey Architecture Across Cultures in the 1950s and 1960s* (Routledge, 2017).
[55] Ibid. p.85

Architecture and City Planning in his report in 1953. In 1954, he signed a charter for the establishment of the Institute with the director of the progressive Highway Department of Turkey. In this contract, it was written that the Institute to be established would provide education and training to young people by the distinguished urban planners and architects of the western world. After the government approval, the project was put into effect by the Minister of National Education of the time. Holmes Perkins (Head of the Department of Architecture of the University of Pennsylvania) was invited to Ankara to supervise the academic and physical establishment of the Institute.[56]

3.3.1 Architectural Design Competitions for the METU Campus

Within the framework of the above-mentioned principles, the first architectural design competition for the METU campus was held in 1959. Architect Turgut Cansever won the first competition, but the project was not implemented. The project did not fulfill the criteria in terms of Master Plan principles. The conflicting position of the first-placed project was rapidly realized, and a second competition was held in 1959. Twenty-one projects participated in the second competition. The project of Altuğ and Behruz Çinici won first place in the competition, which was concluded on August 21, 1961. According to the jury report, the successful use-evaluation of the land, and successfully placing the three main components of the given program (the academic core, the architectural competence in the dormitories, lodgings, and social facilities) were explained as the main reasons for the project to be selected first. On October 15, 1961, a contract was signed for the construction of the Faculty of Architecture, two dormitories, and the campus master plan. Later, with the decision taken by the school administration, Çinici Architects started to work on the design

[56]Ibid.

of the whole campus.[57] On March 12, 1962, the foundation of the Faculty of Architecture was laid with a ceremony. Thereby, the construction of the METU campus began. Gate A1, which will be examined in this thesis, was constructed along with other structures on the campus in 1969.

3.3.2 Competition Drawings

It is necessary to mention how the drawings to be examined are formed in this study. The first drawings of the campus were the drawings submitted for the competition in 1961 expressing the design intentions. Ayşen Savaş defines these drawings as the tools to discover the "dream of the architects". As indicated in the conservation planning report, there are different sets of original drawings: “the first set of drawings includes the Faculty of Architecture, the administration building, the dormitory building, and the overall campus plan.[58] The second set of drawings is conceptual drawings. These drawings were produced in the process between the competition and the application. The most significant changes in the design idea of the campus can be observed in this series of conceptual drawings. The third set of drawings is application drawings. In this set, there are detail projects called "Architectural Decoration Project”. The fourth and last set is the "Published Drawings" consisting of plan, facade, section, and plan notes prepared by architects and sent to international architectural publications. This set, which includes explanatory texts, detail drawings, and black-and-white photographs of the campus, represents the most accurate data regarding the "as-built" phase of the building.

The drawings of the Gate A1 and detail drawings of the related structures examined and reproduced in this study are from the third set. This set of drawings was created in 1969 for the gate's construction process. Although the gate is depicted in the

[57] Kemal Kurdaş, *ODTÜ Yıllarım “Bir Hizmetin Hikayesi”* (ODTÜ Geliştirme Vakfı Yayıncılık, 2002).p.59.
[58] Savaş and Al., “The Conservation Plan for METU.”

second set of drawings, made in 1967, these "concept drawings" never came to the realization. This collection of drawings can be described as an "architect's dream."

3.3.3 New Construction Techniques on the Campus

> "METU is the result of the creative mind of post-war architecture and engineering. The campus has become the laboratory of new materials, mechanical equipment, and construction techniques in Turkey. METU also has the necessary infrastructure for modern urban planning. The construction site of the METU campus is full of monumental units such as high-ceilinged lecture halls, auditoriums, and laboratories." [59]

In the METU campus, new structural methods have been experimented with for the construction of the buildings on the campus. Exposed concrete debuted in Turkey with the construction of the Faculty of Architecture building. Founding Rector, Kemal Kurdaş described the process of the new technique as follows: "The exposed concrete method was used for the first time in Turkey and we did not know this method sufficiently, we did not even know it at all, we invited experts from Germany for this job. Hayne Haine trained the staff. He advised on how to make a mold and how to pour and mix it. With this construction technique, the university was built, and its architecture became a model for the country.[60] Likewise, for the first time in Turkey, a central heating system was applied to the campus.[61]

New materials meant new joint solutions, finishes, forms, and, in an essence, new details. These new details would be seen at METU for the first time in Turkey. In

---

[59] Sargın Savaş and Sargın, "A University Is a Society: An Environmental History of the METU Campus."
[60] Ibid. p.68.
[61] An extensive study was done by Ömer Faruk Ağırsoy under the Campus Utopias Project. Further information: Intelligent Infrastructures: Anatomy of The METU Campus, unpublished Master Thesis, METU, 2022.

other words, these details would represent something new and modern, both physically and socially.

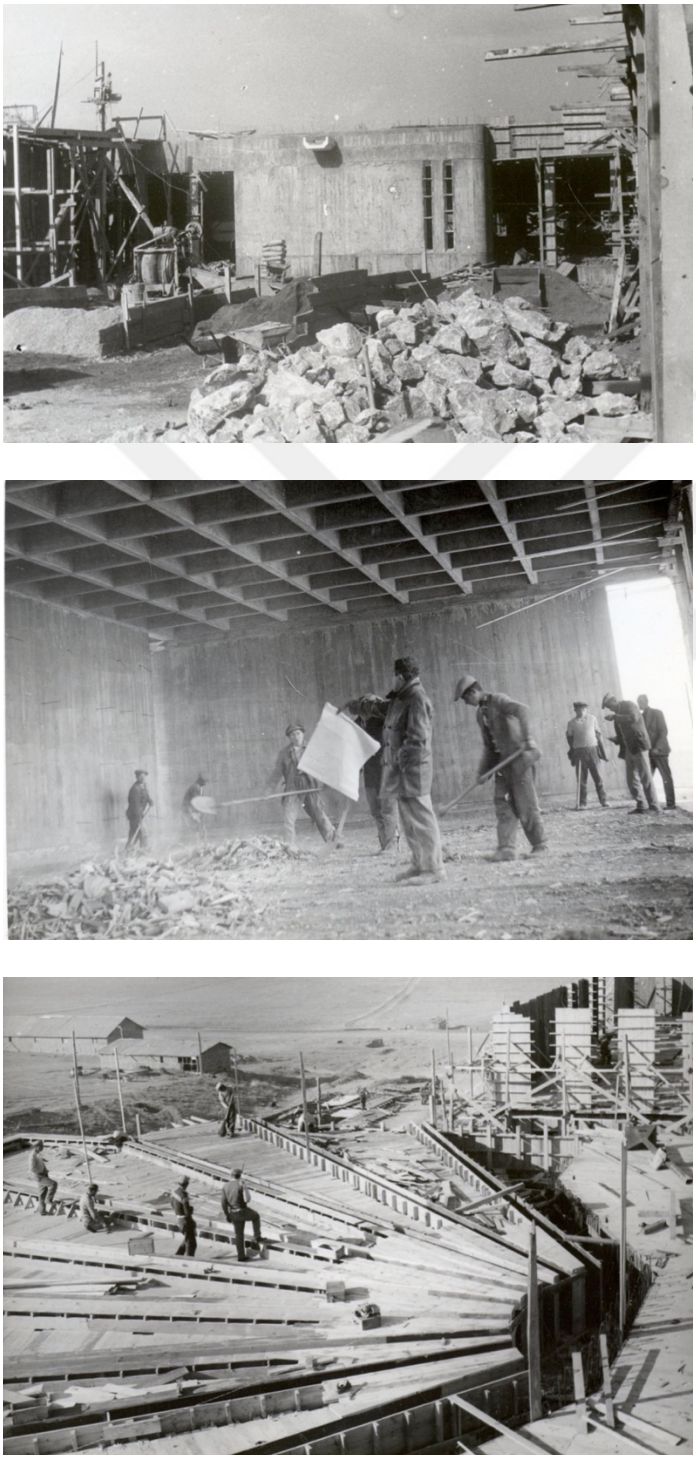


Figure 3.1. Concrete construction, METU,1950s.

3.4 The METU Campus as a Gated Community

The METU campus was constructed five kilometers outside the new city, on a barren land surrounded by Eskişehir and Konya intercity roads. METU campus, which has been a gated campus since the first day of its establishment, provides permeable contact with the city only through its gates. The majority of the METU Campus's gates are open to the forest. Ironically, and under the university's ideology, which is attempting to establish a society with an entirely different school of thought as mentioned above, the gates separate the campus from the city, and the gate of the campus is the city itself, which has a completely different mindset than the campus. The campus has ten gates, but only seven of them are currently active. While all of the campus's outer gates have indirect connections to the city's main roads, Gate A1 has a direct connection to the Eskişehir Road.

Gate A1 has received a lot of attention in terms of design and monumentality. It has a symbolic meaning in that a "gate" is an entrance into a new world, which is frequently associated with a new and different life. When viewed from the outside, a gate point to openness is inviting and provides a passage to the unknown inside, whereas when viewed from the inside, the concept is associated with enclosure and division. This is consistent with the university's ideology, which was to create a visionary community that was both isolated from and visible to the city as an inspirational establishment. The visible invisibility is rendered by Gate A1.

3.4.1 Gates of the METU Campus

The campus has eleven gates, but only seven of them are currently active: Gate A1, Control Gate A1, Gate A2, Gate A2 Metro, Gate A3, Gate A4, Gate A5 Gate A7, Gate A8, Teknokent-METU and Teknokent Gate (Figure 3.1). Gate A1 Gate, located at the campus's northernmost point, connects the school's main artery to Eskişehir Road. Since its establishment, this gate has served as the main entrance gate to the Campus. It is also the only gate designed by the Çinici architects. Alongside the A1

gate is the A1 control gate, the fold, designed by Ayşen Savaş and Barış Yağlı. Gate A2 is located northwest of the campus and connects to the Eşkişehir road. This gate is a vehicle exit gate connecting one of the campus arteries to Eskişehir road. It is accessible at certain times of the day. At the same location, the Metro A2 pedestrian gate connects to the campus via the M2 metro line. There is only a standard station entrance here in terms of structure. Gate A3 is on the east side of campus. It was linked to the building of the alumni association of the university. It was decommissioned following the construction of Malazgirt Boulevard. Gate A 5 serves as the Rector house garden gate, and Gate A4, designed by Haluk Zelef and Barış Yağlı, leads to the campus's eastern boundary. It leads from the eastern dormitories to the Yüzüncüyıl neighborhood. This gate serves as a vehicle and pedestrian entrance and exit. It is the most actively used gate by students after Gate A1. Gate A7, leads to Bilkent Boulevard in front of the science and technology museum on the west side of campus. Access for pedestrians and vehicles is generated and actively used. The gate was designed by Haluk Zelef. Gate A8 connects the western professor lodgings to Bilkent Boulevard. Since the newly constructed Bilkent Boulevard is higher than the campus level, it is not currently in use. The gate was designed by Ozer & Ulger Architects. METU-Teknokent gate connects the campus's Teknokent area to the central area. A security room designed by Ozer & Ulger Architects was constructed there in 2022. The Teknokent gate is on the west side of campus. It was constructed in 2022. The vehicle and pedestrian gates allow access to and from the Teknokent. Ozer & Ulger Architects designed it. There are two more gates on campus, one of which is open and leads to Eymir Lake.

The gates mentioned above refer to the overall aesthetic of the campus. They provide a contemporary interpretation of the campus's current details, particularly materials, by referencing them. These gates, which were built later on campus, could not prevent Gate A1 from being monumental and symbolic. Even a non-architect visitor can envisage that Gate A1 was designed by the campus architects as a continuation of the campus. It is obvious that Gate A1 was designed in collaboration with the campus architects, as it is a continuation of the campus.

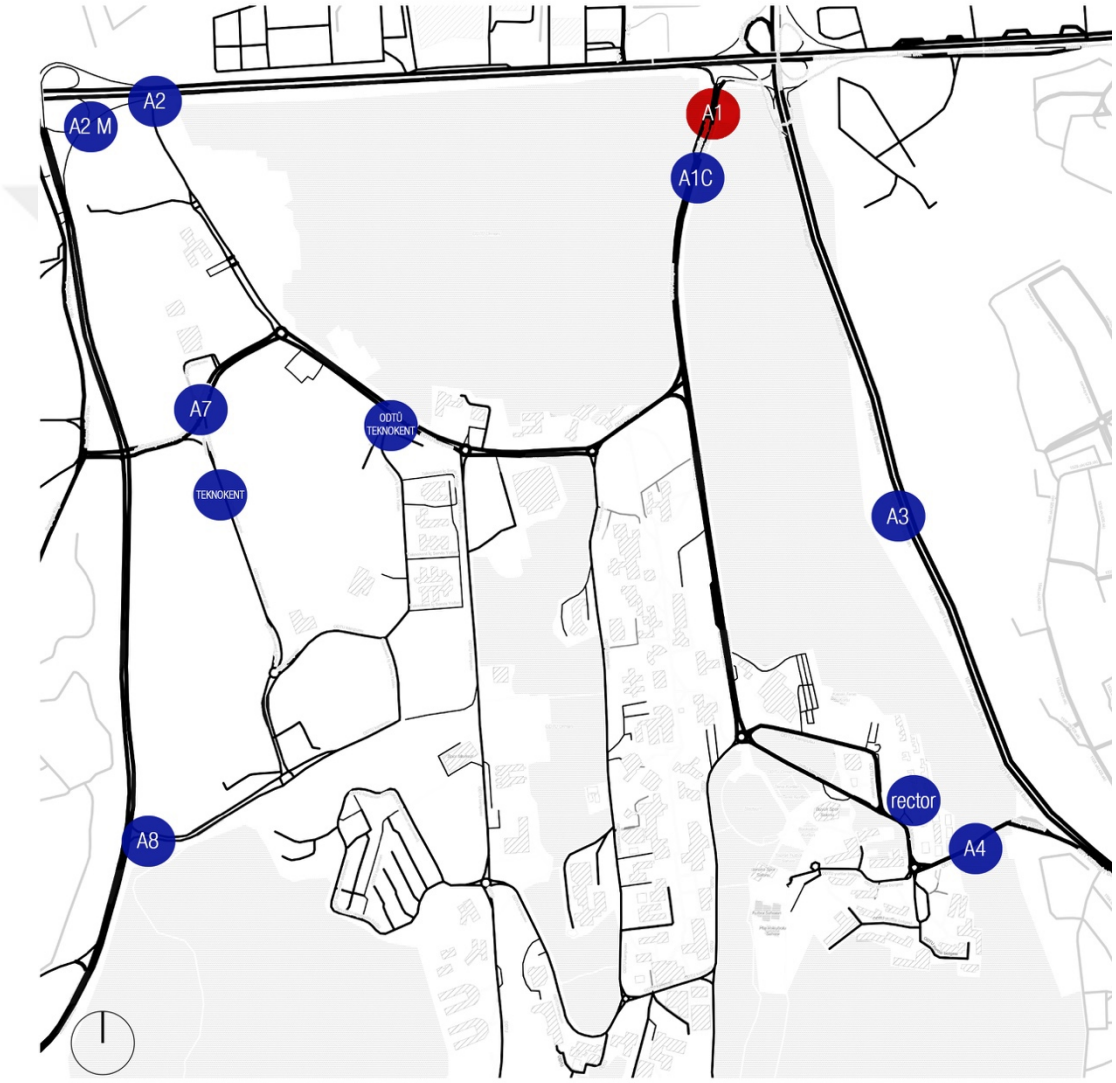


Figure 3.2. Campus gates, (Produced by Author).



Figure 3.3. Campus gates, (Produced by Author).

3.4.2 The Main Gate A1

As previously stated, the only gate designed by the campus architects is Gate A1. Since the campus's construction, it has been the only building with direct contact with the city, serving as a monument to the campus. Before examining the gate in detail in the following section in terms of architecture, under this heading, the situations that the gate faced during the process, the duties it has undertaken, and its current situation will be briefly mentioned.

3.4.2.1 Gate A1 and *Bilim Ağacı*

The METU campus not only has a variety of buildings and a well-designed landscape, but it also has several works of art. Atatürk monument and the Bilim Ağacı are two of the most well-known of these works of art. A competition was held in 1966 to build a monument in memory of Atatürk on the campus. Sadi Çalık's project won first place, with sculptor Tamer Başoğlu and architect Ersen Gürsel 's design coming in second. The first project was placed in front of the rectorate building. The second project, "Bilim Ağacı," also impressed Çinici Architects and Kemal Kurdaş. This monument was placed on the top of the flat hill to the right of the campus entrance by unanimous decision (Figure 3.4, Figure 3.5). Bilim Ağacı remained in its original location for 25 years before being relocated directly in front of the university entrance gate as the trees in the surrounding forest grew and rendered the monument invisible from a distance (Figure 3.6). [62]

The flag poles next to the guardhouse were moved to the right side of the science tree. With this situation, the gate lost its feature of being the first structural element encountered at the entrance to the campus and the first structural element that greeted the visitor. The monument is remembered by the urbanites of Ankara when the

[62] Kurdaş, *ODTÜ Yıllarım "Bir Hizmetin Hikayesi."*pp.139.

METU campus entrance gate is mentioned, both because of its location and striking plastic. This situation has weakened the social representation power of the gate.

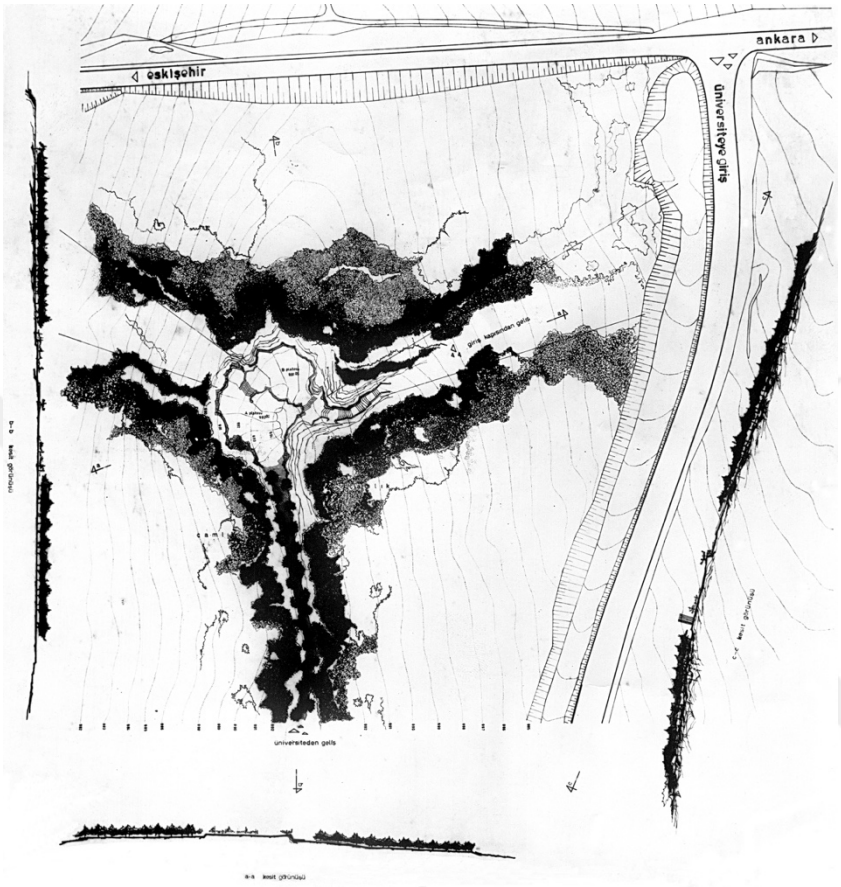






Figure 3.4. *Bilim Ağacı* site plan, 1966.

Figure 3.5. View from the first location of the sculpture, 1966.

Figure 3.6. View from the current location of the sculpture, 2022.

3.4.2.2 Gate A1 and Construction of the Metro

On March 13, 2014, the M2 metro line, which connects the city center to METU, opened. The metro station, which has standard station exits, is located on the Eskişehir road section that curves into the campus. Unfortunately, since the subway's operating, the ventilation elements of the subway, elevator, and exit have become structural elements that meet observer before Gate A1. These elements, which have no design resemblance to the METU campus, are the first structures to encounter urbanites.

The first suspension bridge crossing the Eskişehir road was designed by Ayşen Savaş and Barış Yagli at METU (Figure 3.7). Engineering calculations of the bridge were made by METU Mechanical Engineering department instructors under the supervision of Engin Keyder and presented to the municipality. METU Mechanical Engineering department instructors completed bridge engineering calculations under the supervision of Engin Keyder and presented them to the municipality. In the years when the bridge was designed, rail transportation (tram) was planned to be at road level. Later, the bridge, which was built without the knowledge of METU and lost its features of the suspension bridge and ramp access at this stage, was built throughout Ankara.

Accordingly, the METU administration launched the Monorail project, directed by Canan Çinlingir, Haluk Darendeliler, and Ayşen Savaş. The AI-Culture and Convention line, which was in the testing phase, had been postponed to the next administration (Figure 3.8). However, it was not until this point that it was discovered that the metro would be going underground, and a new arrangement was requested from Çinici office. An underpass beneath the road connected the metro exit and the Monorail stop.

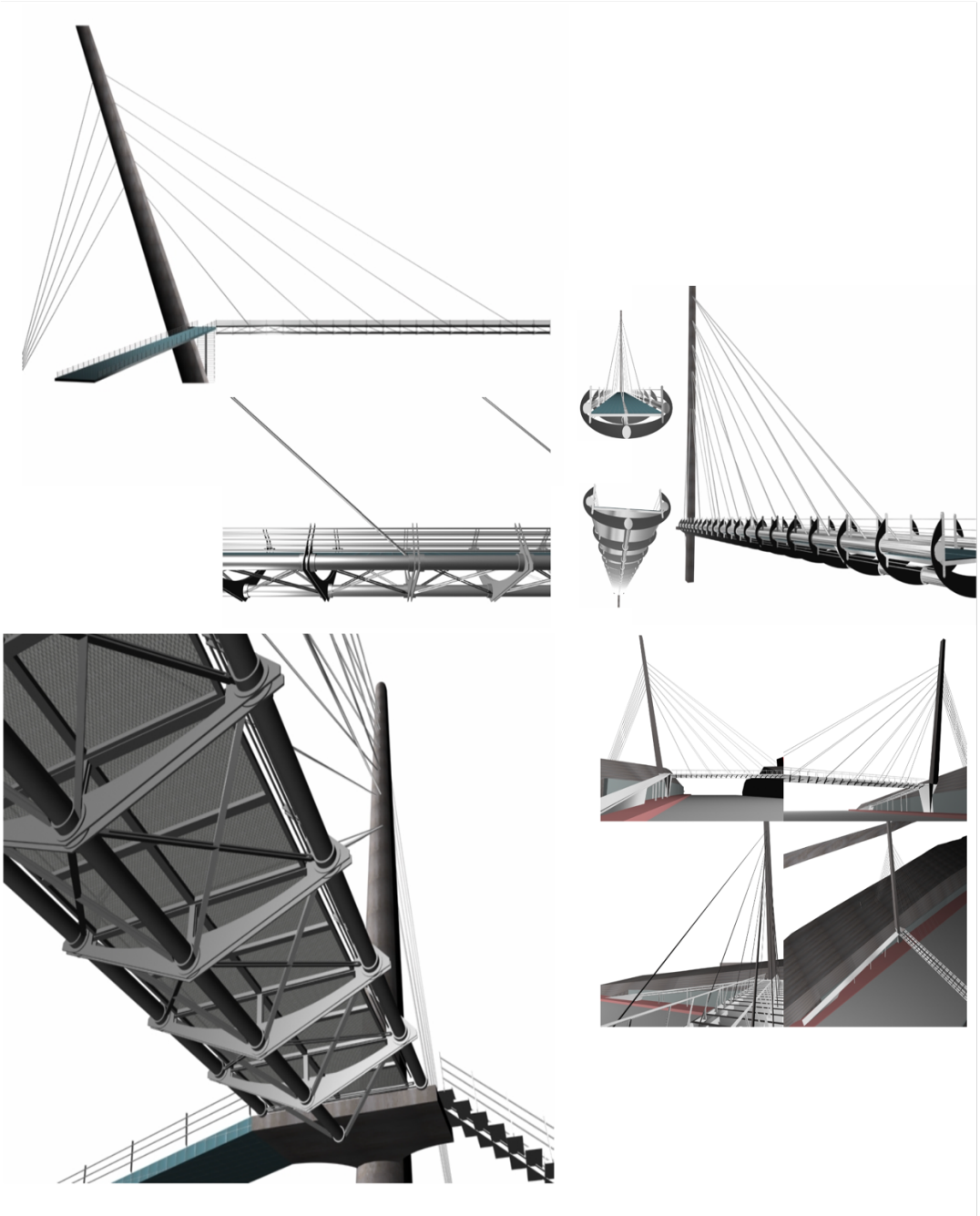


Figure 3.7. Suspension bridge, Designed by Barış Yağlı and Ayşen Savaş (Barış Yağlı, 2004).



Figure 3.8. Underpass and the Monorail stop, 2005 (Can Çinici).

3.4.2.3 Social and Political Events at the Gate

While the gate is a threshold in the architectural sense, it is also a social and political threshold for METU. Although it is outside the scope of this thesis, Gate A1 has always taken on the role of being a point of resistance since the first day of student upheavals at METU. For “outsiders” it has been defined as an impenetrable border and has become a barricade. Currently, the gate still serves as a barrier between the outside and the inside. Gate A1 is the structural representation of METU’s public memory of political and student upheavals. In this context, the gate has a place in the urban memory. An incident that occurred during the boycott in 1977 is an example of this. An argument erupted between the Student Representatives and the Gendarmerie after the Gendarmerie failed to conduct routine searches of a group at Gate A1.

Ertuğrul Karakaya's opposition to the gendarmerie's desire to search the representatives who were already inside, the gendarmerie opened fire at the gate through the Karakaya. He was shot and died there. After this incident, Gate A1 was known as the Karakaya Gate among revolutionary groups and become a symbol for them.



Figure 3.9. Student Upheavals, 2014.

CHAPTER 4

METU GATE A1 AS AN ARCHITECTURAL DETAIL

This chapter will explore the details of the sculpture-like plastic of Gate A1 as a part of the METU Campus in terms of being a successful example of narrative detail (Figure 4.1). The campus is a ground of narrative and fertile details. In this chapter it is aimed to extend the understanding of the details of the campus, revealing the structural and material clues regarding the architects' intentions for the campus's first impression by analyzing Gate A1's design, while focusing on how details functions as representational architectural elements, the continuity of them, and the method of their use. It will also be examined whether the gate is both a detail formed the campus and a part formed by the campus. The structural, plastic, and surface qualities of Gate A1 will be unveiled in this chapter through design research on its meticulously drawn plans, sections, facades, detail drawings, and *in situ* research.



Figure 4.1. Gate A1, 1969.

The METU campus is identified as a whole, generated from a variety of parts on multiple scales, as mentioned in previous chapters. While the entire campus is considered as a detail akin to Alberti's case, the structures that comprise the campus are also considered details. These structures' architectural elements are also evaluated as details. Gate A1 was chosen as a detail to be investigated in this study based on this argument and its representational role discussed in the previous chapter.



Figure 4.2. 3D visualisation of Gate A1, (Produced by Talha Yazıcı and Author).

4.1 Gate A1

Gate A1 is located on 659 square meters of land at the northern end of campus. It was designed between 1967 and 1969 and constructed in 1969. It provides access to Eskisehir Road from the campus. As a result, it serves as the intersection of the internal and external circulation roads. Since it was depicted in the second set of as-built drawings, which were drawn between 1960 and 1970, the gate was clearly a design problem and considered as a detail when the entire campus was being designed. When the drawings and reports are examined, it is revealed that Gate A1 was the only gate considered and designed during the overall design of the campus.



Figure 4.3. 3D visualisation of Gate A1, (Produced by Talha Yazıcı and Author).

4.2 Understanding Gate A1

Understanding Gate A1 is possible by scrutinizing the details and characteristics of the details embodied by the gate. To understand the gate, two important sources will be studied: the architects' original detail drawings and *in situ* research.

Since drawings are the primary products of architects, original detail drawings will be examined.[63] Architects use drawing as an intermediary tool to communicate their ideas on paper. The drawings of architects' projects and spread a clearly defined idea. These ideas may be bent, broken, or lost while being transferred to paper, leaving them vulnerable to translation loss. Constraints include representational styles, types, and techniques.[64] As a result, *in situ* research was mandated. Along with the drawing research, *in situ* research was conducted while examining the detail from the element scale to the joint scale.

4.3 Drawings of Gate A1

Gate A1 has two design studies. These studies and their set of drawings were used for this design research. The first set consists of four layouts, and unimplemented concept drawings created in 1967 for the design of the Gate. They can be named as an "architect's dream." The second set of drawings involves ten layouts of as-built drawings created during the gate's construction process in 1969.

The first design was created by Altuğ and Behruz Çinci, along with assistant architect Güngör Özme. This design includes four layouts, all of which have been reached. The second design was created by architects Altuğ and Behruz Çinci. The drawings were created by architect Çetin Sipahi (Figure, 4.4). Only eight of these drawings

---

[63] Robin Evans, "Architectural Projection," in *Architecture and Its Image: Four Centuries of Architectural Representation: Works from the Collection of the Canadian Centre for Architecture* (Cambridge: The MIT Press, 1989), 19–35.
[64] Ernst Gombrich, *Art and Illusion, A. W. Mellon Lectures* (New York: Bollinger, 1960).

were available at the Salt Archive and the METU Building Operation Directorate Archive.

The layouts use multiple scales, and the gate is represented as a detail alongside other details, just like in the *analytique* drawings. Each drawing contains numerous details of the gate. The drawings are more than just blueprints for construction. The layouts are created in such a way that they *tell the tale* of the METU. Consequently, these drawings are valuable for interpreting the architects' intentions. *situ* research.

	ARCHITECTS	DRAWING NAME	SCALE	DRAWING NO	DATE
1	Altuğ Çinici, Behruz Çinici Güngör Özme	METU Entrance Gate Site Plan	1/500	1	23.06.1967
2	Altuğ Çinici, Behruz Çinici Güngör Özme	METU Entrance Gate Plan, section, view, and detail	1/20 1/100	2	30.06.1967
3	Altuğ Çinici, Behruz Çinici Güngör Özme	METU Entrance Control Room Plan, section, view, and detail	1/20 1/2	3	11.07.1967
	Altuğ Çinici, Behruz Çinici Güngör Özme	METU Entrance Gate Plan, section, view, and detail	1/200 1/50 1/20	4	06.06.1967

	ARCHITECTS	DRAWN BY	DRAWING NAME	SCALE	DRAWING NO	DATE
1	Altuğ Çinici, Behruz Çinici	-	-	-	-	-
2	Altuğ Çinici, Behruz Çinici	Çetin Sipahi	METU Entrance Gate Site Plan, illuminated centrale refuge, road details	1/50 1/10 1/20 - 1/10	2	1969
3	Altuğ Çinici, Behruz Çinici	Çetin Sipahi	METU Entrance Gate Site Plan Facades, road section	1/50 1/20 1/10	3	1969
4	Altuğ Çinici, Behruz Çinici	Çetin Sipahi	METU Entrance Gate Plastic A application project.	1/50	4	1969
5	Altuğ Çinici, Behruz Çinici	Çetin Sipahi	METU Entrance Gate Plastic B application project.	1/50	5	1969
6	Altuğ Çinici, Behruz Çinici	Çetin Sipahi	METU Entrance Gate Security room, illuminated bollard	1/20	6	1969

7	Altuğ Çinici, Behruz Çinici	Çetin Sipahi	METU Entrance Gate Security room	1/50 1/20	6 EK	1973
8	Altuğ Çinici, Behruz Çinici	Çetin Sipahi	METU Entrance Gate Security room details, system section	1/20	7	1969
9	Altuğ Çinici, Behruz Çinici	Çetin Sipahi	METU Entrance Gate barrier details	1/20	8	1969

Figure 4.4. List of the drawings (Produced by Author).

4.4 Details of Gate A1

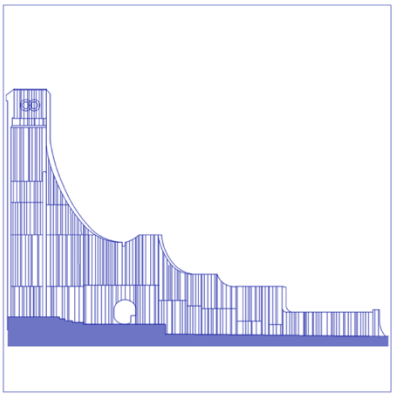
4.4.1 Architectural Elements That Constitute the Gate A1

Gate A1 is composed of ten major components; Plastic A, plastic B, stairs between plastic A and B, embedded projector pit, security room, gargoyle and water bowl, refuge and lighting elements, pedestrian walkway, parapet, and vehicle road, and concrete bollard light (Figure 4.5, Figure 4.6).

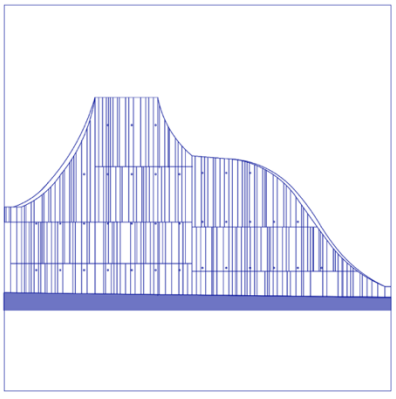


Figure 4.5. Architectural elements of the Gate,(Produced by Author).

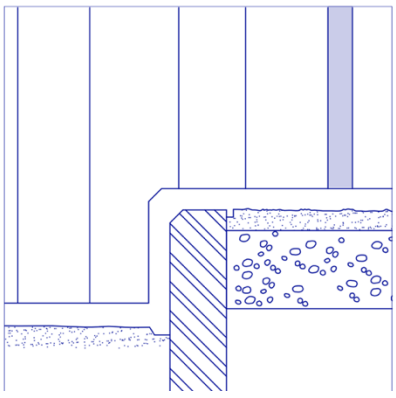




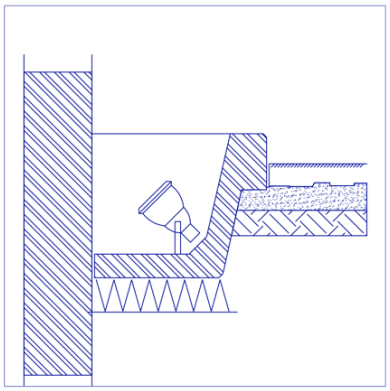




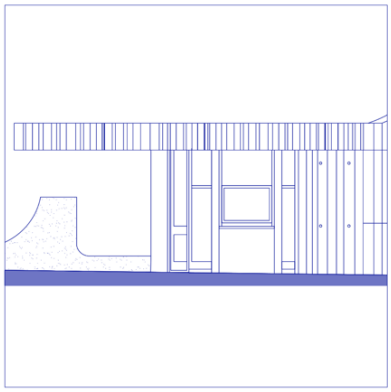




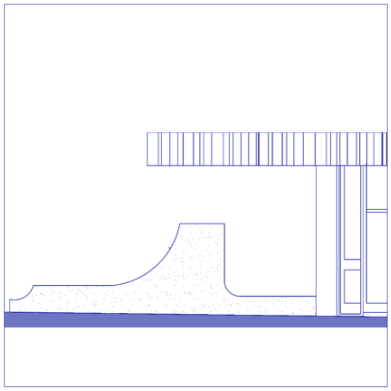

4








6



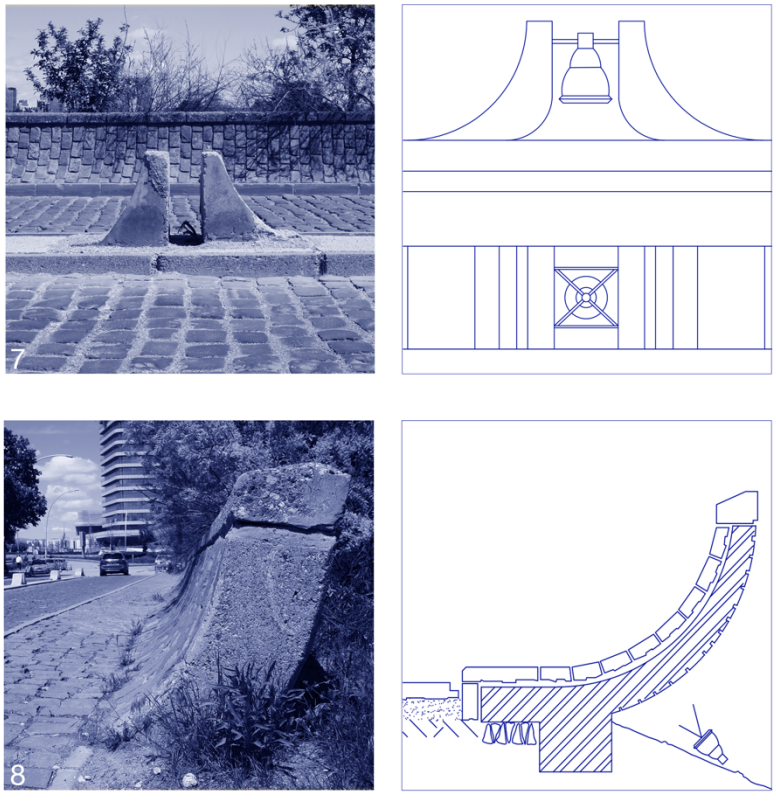


Figure 4.6. Architectural elements of the Gate (Produced by Author).

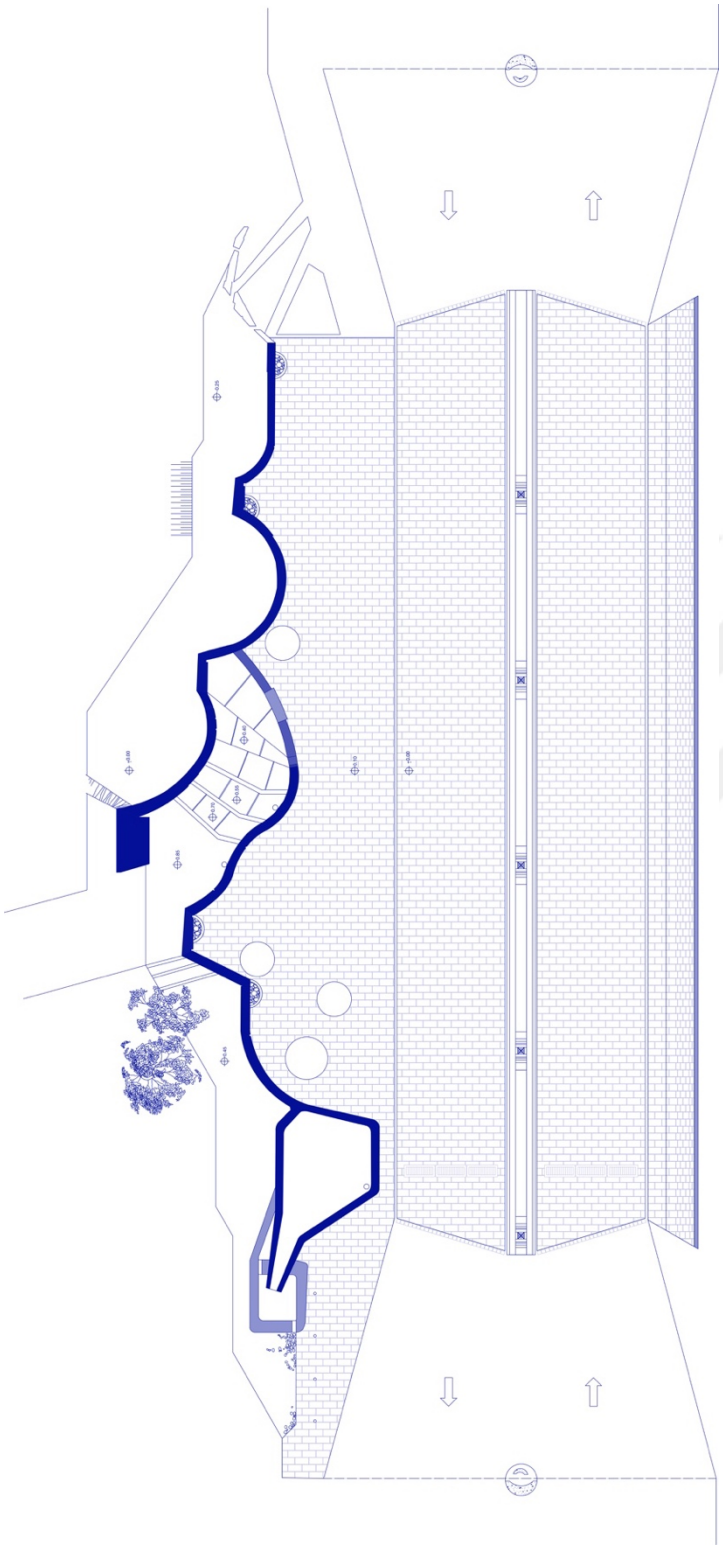


Figure 4.7. Gate A1 Plan (Produced by Author).

Plastic A and B

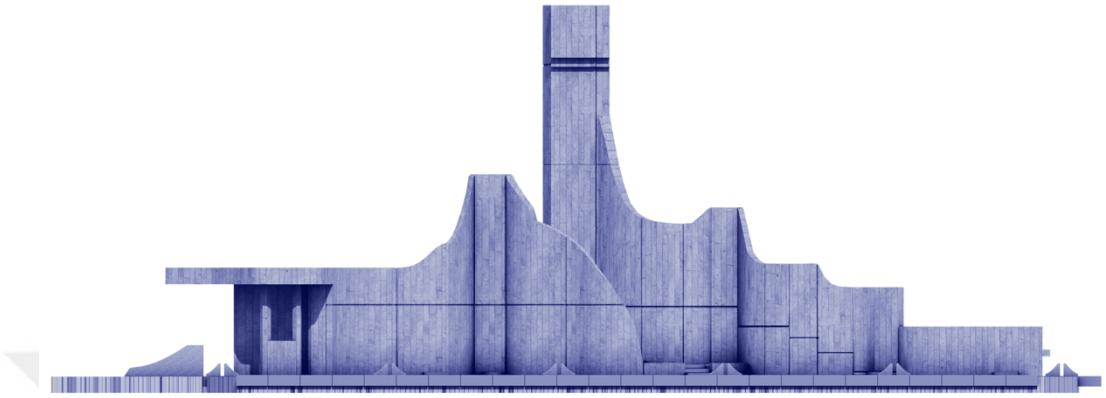


Figure 4.8. Front view of plastic A and B (Produced by Author).

Plastic A and B's sculpture like plastic with its widened, narrowed, and cavitied surfaces became the first remarkable details of the gate (Figure 4.8). Plastic A is 19 meters on the north-south axis and 5.8 meters on the east-west axis. The measurements from its highest point to its lowest point are 12.25 meters, 5 meters, 12.25 meters, 2.40 meters, 1.20 meters, and 1.15 meters, respectively. Plastic consists of three curved and flattened (c, e, d) surfaces (Figure 4.9). When the drawings are examined, it is seen that a one-meter-wide hollow was drawn on the first curved surface and two rectangular hollows were drawn as a *motif* on the second curved surface. The university logo is designed on the upper part of the C plane. However, *in situ* research reveals that these details are not applied during construction.

Plastic B is 8.33 meters on the north-south axis and 4.5 meters on the east-west axis. The measurements from its highest to its lowest point are 6.50 meters, 4.65 meters, and 0.40 meters, respectively (Figure 4.10). Plastic consists of four curved and two flattened (a, b) surfaces. The letters "ODTÜ" were written at the top of the A plain, but they were not implemented. The northern facade of the security room is formed

by the southern extension of Plastic B. The stairs between plastics A and B are also defined by the northern extension of the plastic.

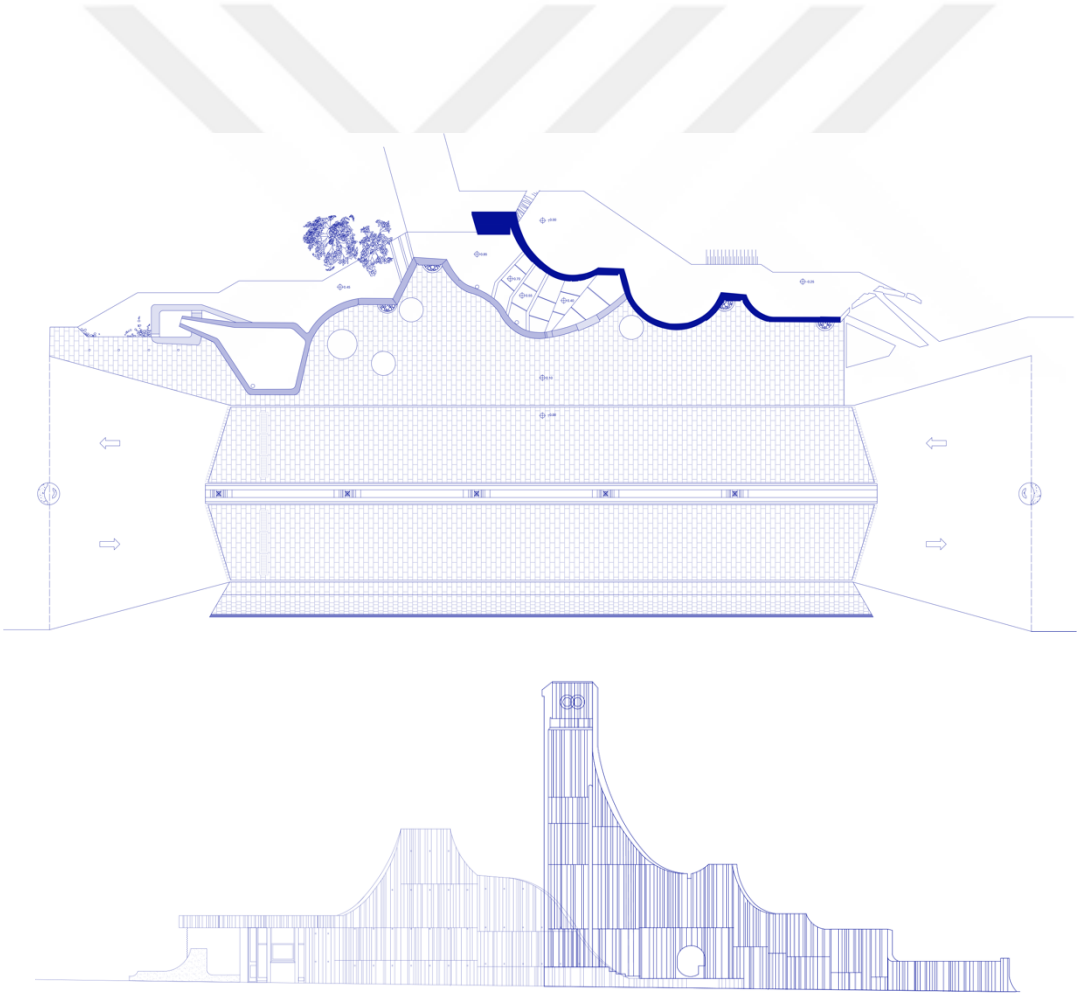


Figure 4.9. Plan and front view of plastic A (Produced by Author).

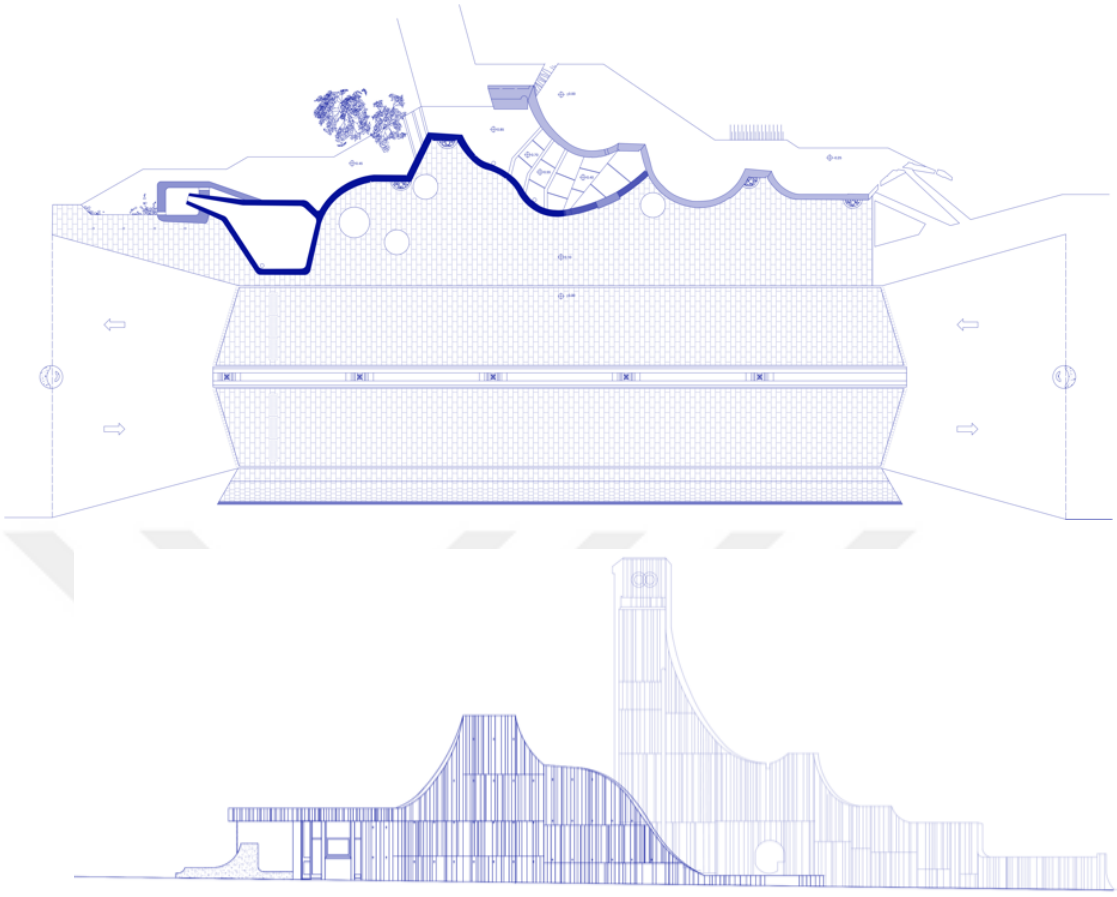


Figure 4.10. Plan and front view of plastic B (Produced by Author).

The plastics are made of concrete, which is one of the limited main materials used on campus, as stated in the competition specifications. The finishing designed for the plastics' surface is extensively defined in the layouts. Surface junction points create joint gaps and joint details of concrete molds and *bulon* placings were explicitly defined in the drawings (Figure 4.11, Figure 4.12). As Viollet le Duc stated, this is proof that a new architecture was begun on the METU campus by using the knowledge and tools available to architects at the time. Each material has its own form and ornament for each function.[65] Without the need for additional elements, claddings, ornaments, or *kunstform*, structural details aesthetically emerged from

[65] Viollet-le-Duc, *Discourses on Architecture*.

kernform. As a result of this, structural ornamentation has emerged on artefacts with details.

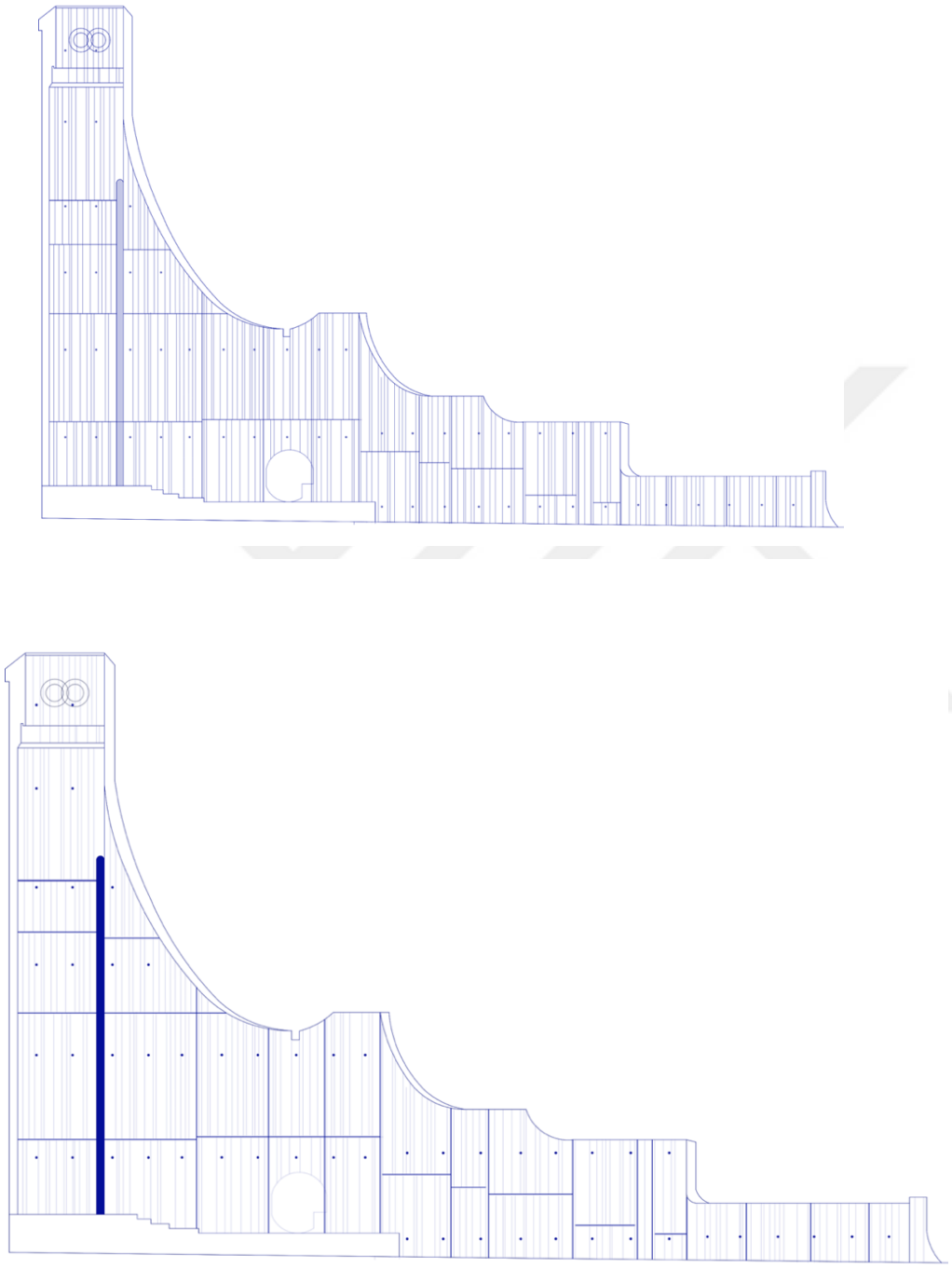


Figure 4.11. On the top defined pattern generated by concrete finishings according to moldings, at the bottom defined pattern generated by *bulon* and joint lines, (Produced by Author).

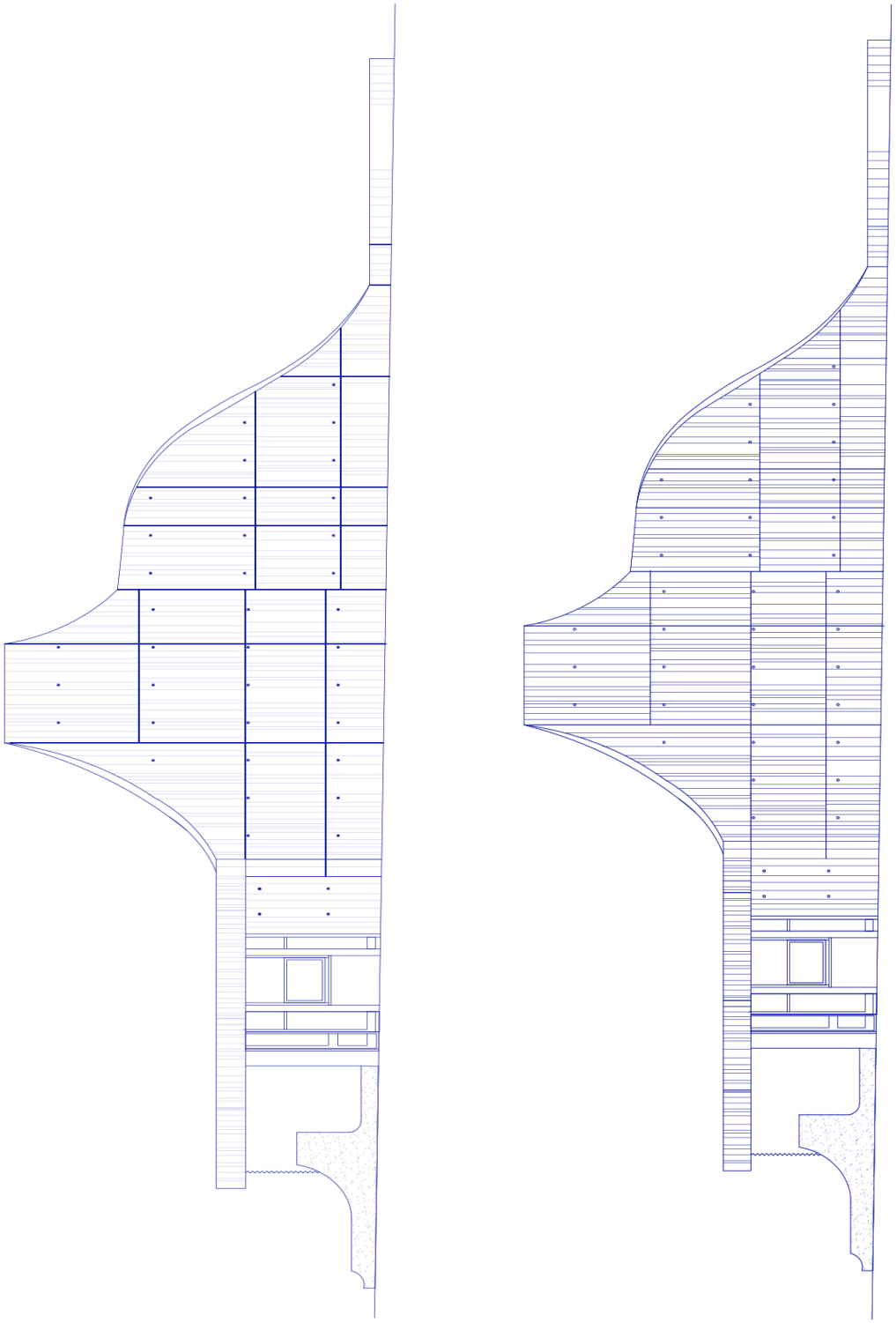


Figure 4.12. On the top defined pattern generated by concrete finishings according to moldings, at the bottom defined pattern generated by *bulon* and joint lines, (Produced by Author).

The use and the way of construction of the reinforced concrete seen at the gate continue in all the campus buildings. Molding locations were designed differently for each building on campus and subtly drawn on the layouts, revealing different finishings of the same material. As a result, various patterns were created using the same material. This situation will become clearer as the use of concrete in the gate's other components is examined in the rest of the chapter (Figure 4.13).

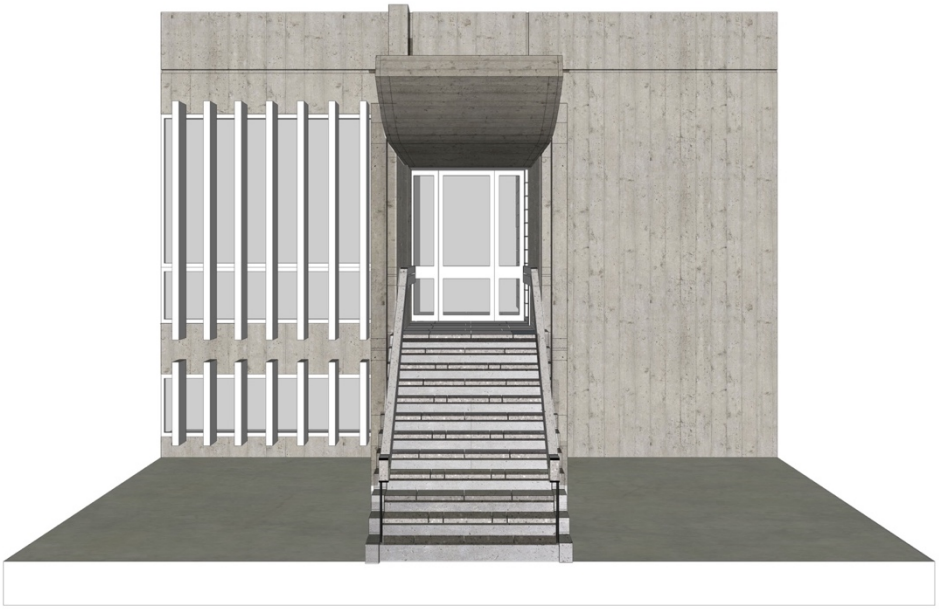


Figure 4.13. Various patterns were created using the concrete throughout the campus (Produced by Author)

The massiveness of reinforced concrete is impoverished by the curved surfaces of Plastic A and B with the dynamism they create. Although the campus is comprised of cubic structures, several curved details are on various scales. These architectural nuances turn the concrete structures from pure massive elements to dynamic elements throughout the campus. These details are represented by the gate's curved structure. The lecture hall building of the Faculty of Arts and Sciences is the most noticeable example of a curved element on the building scale (Figure 4.14). It has a

nearly circular plan and form. Curved surfaces are also visible on the entrance stairs, eaves, courtyard, and amphitheater blocks.

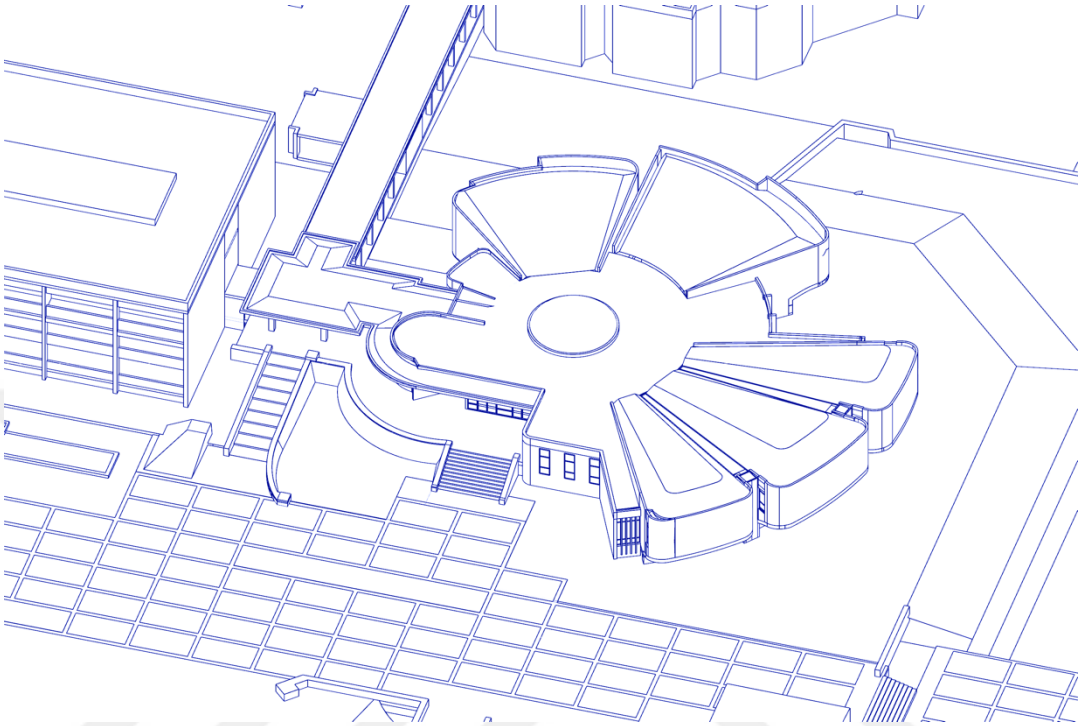


Figure 4.14. Faculty of Arts and Sciences Lecture Hall Building (Model made by Ömer Faruk Ağırsoy, Edited by Author).

These surfaces can also be illustrated on another scale. Curved corners characterize the G3 block, which is part of the Faculty of Architecture complex. Among the other parts of the building complex, it is the only one with curved edges. The interior scale also features prominent and repeated curved surfaces and elements, stair halls and curved niches in the entrance hall of the library building can be mentioned. Curved details can be also found on structural furniture as well as joint scale. Curved edges of concrete or wooden seating units, tables, and marble ashtrays are the most common on the Furniture scale (Figure 4.15). When considering the as-built drawings, it is revealed that the joints are mostly solved with a curved form.

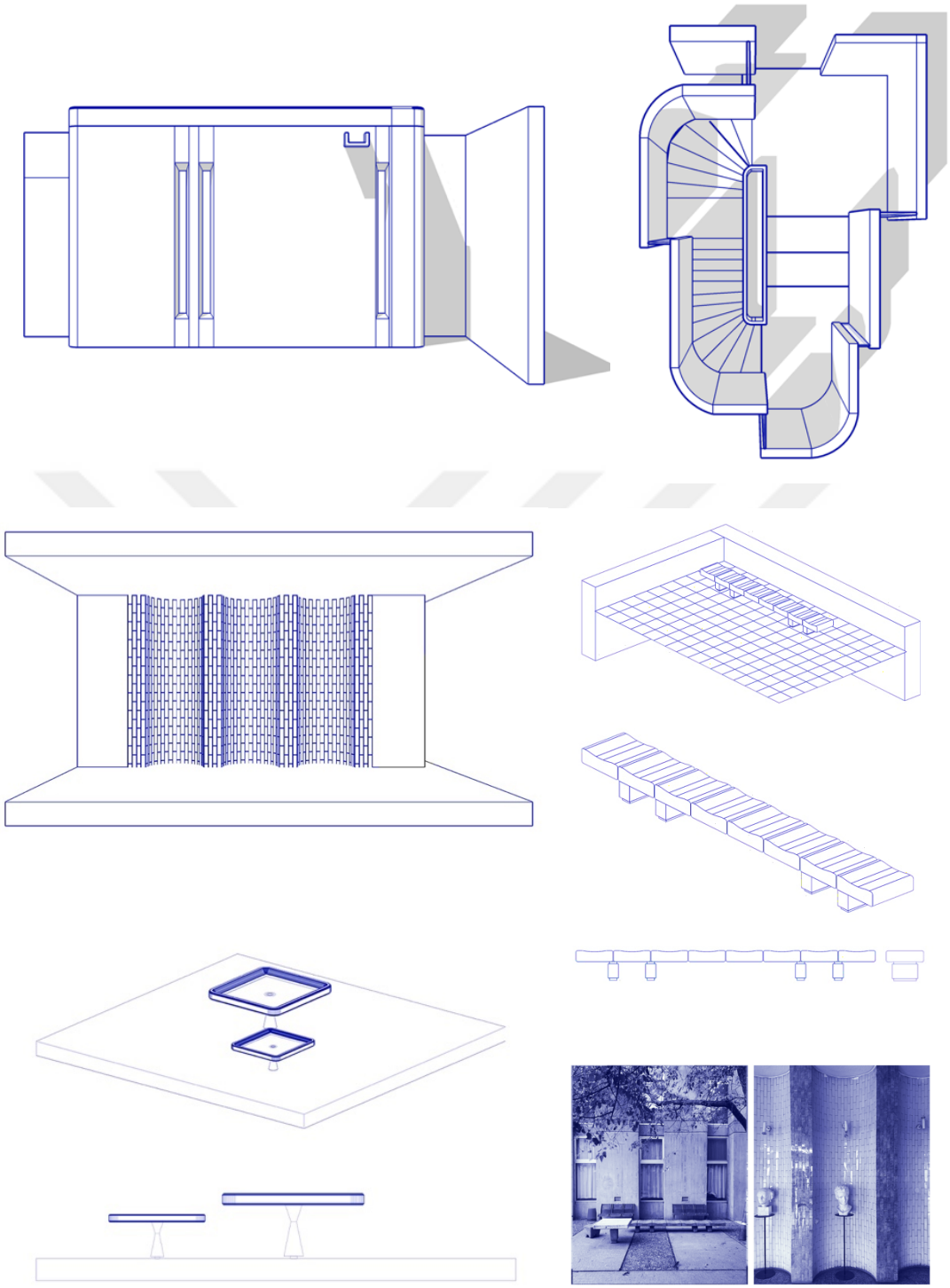


Figure 4.15. Faculty of architecture facade of block G3, library stairs, library entrance, ashtrays, seating units (Produced by Author).

Stairs Between Plastic A and B

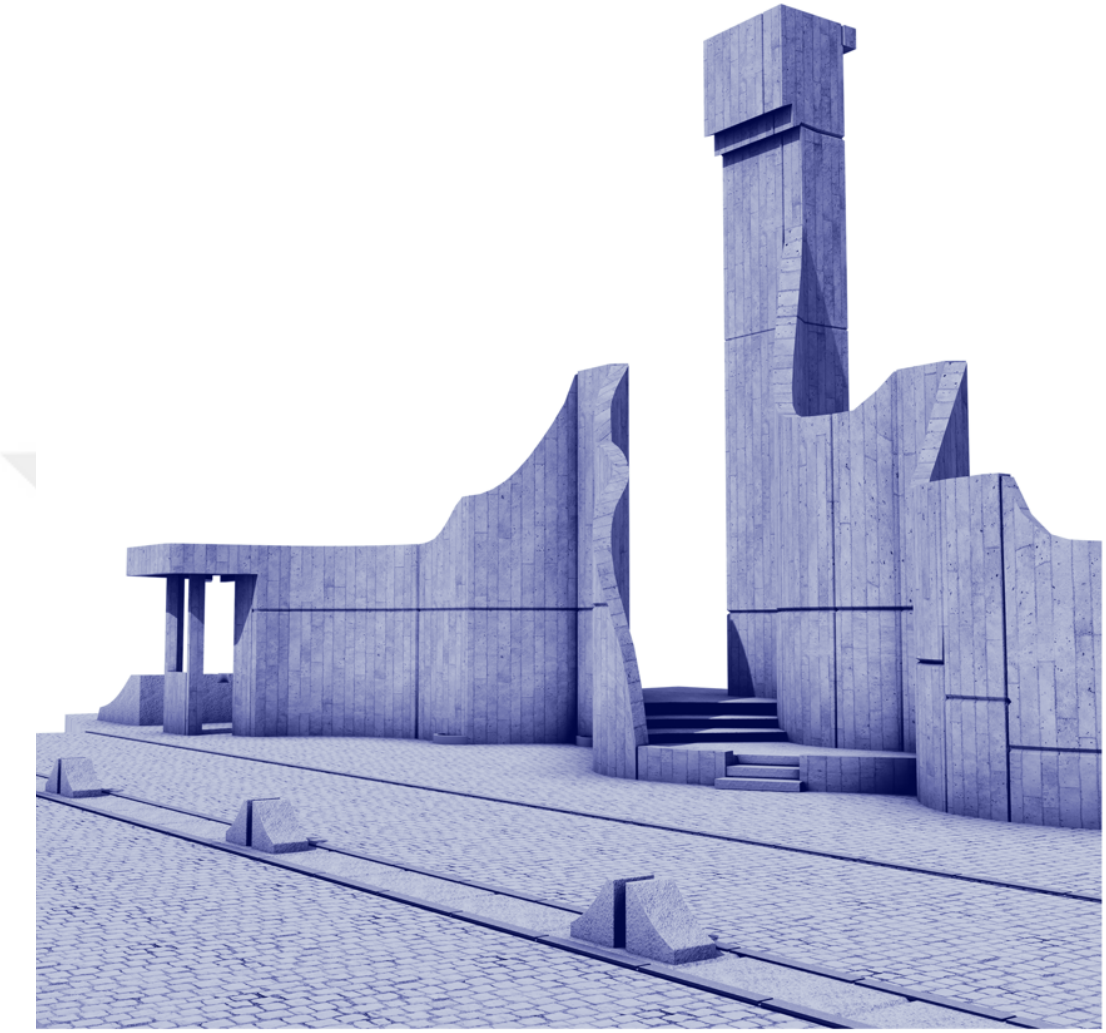


Figure 4.16. Stairs/Gateway between Plastic A and Plastic B (Produced by Talha Yazıcı and Author).

The gateway-like stairwell formed between A and B plastics. Plastic A and B settled on a topography that rises from north to south. The campus was designed in accordance with the existing topography. This design approach is continued at the gate. Rather than interfering with the existing topography, the gate was designed to complement it. The difference in level between A and B plastics increases from 0.10 to 0.85 meters, this transition in topography created the stairs between the two plastics. The gateway consists of five steps, the second and sixth serve as platforms.

the riser height on the first and second steps is 15 cm, which is lower than the riser height on the other steps. Following *in situ* research, it was discovered that elevations ranging from 0.10 meters to 0.40 meters can be reached in three steps rather than two. There are six steps in the current situation, which differ from the original drawings.

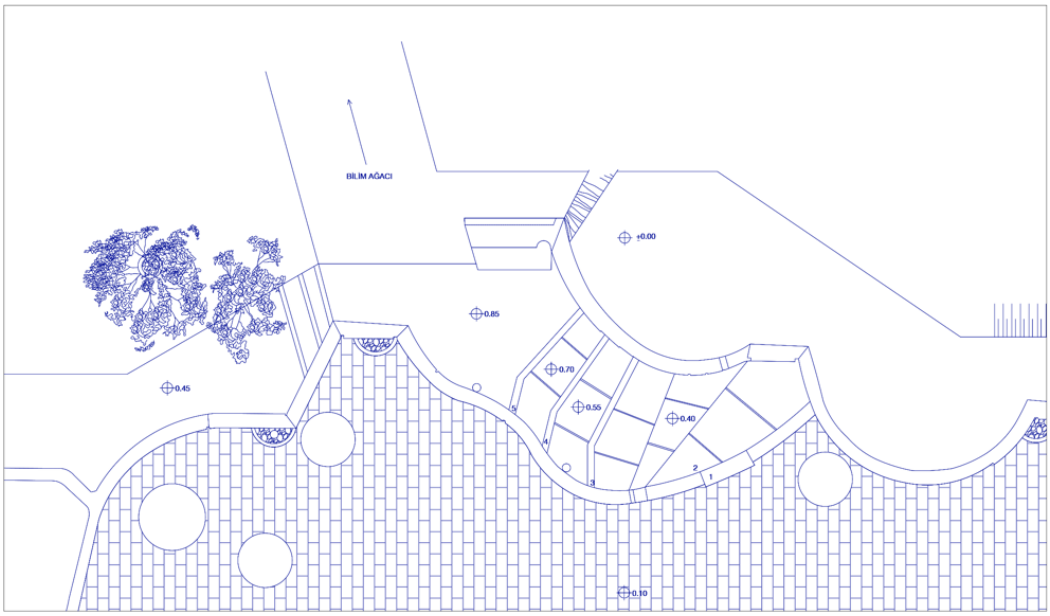


Figure 4.17. Stair plan (Produced by Author).

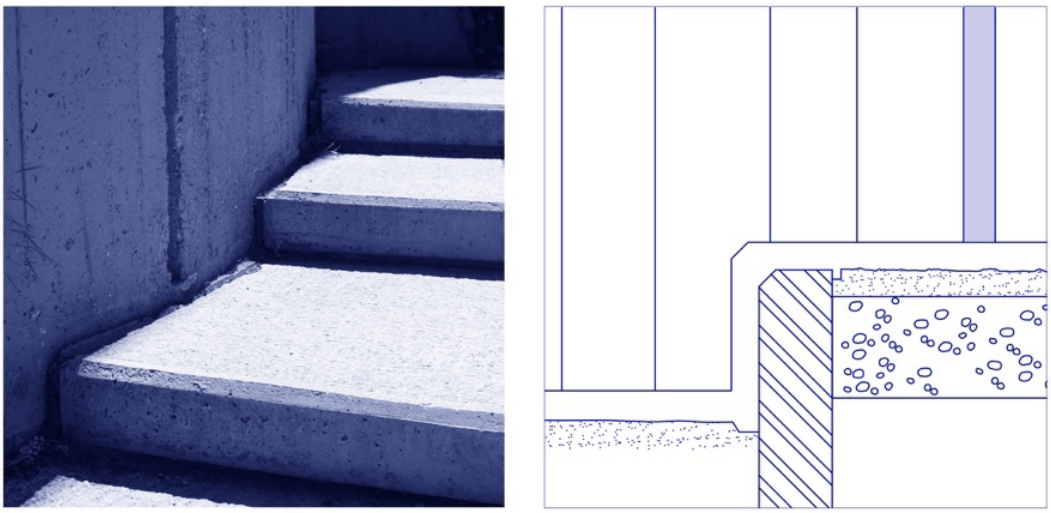


Figure 4.18. Traces of steps (Produced by Author)

The first detail that stands out is that at the points where the stair steps make contact with the vertical surfaces, the traces of the steps are offset on them (Figure 4.18). This joint solution generates a significant and continuous detail. This detail can be seen on all the campus's exterior and interior stairs so, in the words of Frascari, it can be defined as a *fertile detail.* According to him, the meaning of fertile detail can be understood after several uses. Versions of these joint gaps are also seen in wall-floor-wall-ceiling junctions. It identifies between the horizontal plates, which fold and turn into stairs, and the vertical plates, revealing that they are different surfaces (Figure 4.19).

The material of the stair also creates a fertile detail. It is made of ribbed concrete mosaic. It refers to the same material which is used with the same finishing in the inner courtyards of the campus's educational buildings. The joints that formed between the molds used to make concrete flooring material are subtly defined as a pattern in the layouts. The massive effect is also intermittent in this case due to the pattern created by the construction technique (Figure 4.20).

When the first drawings are examined, the gateway can be seen connecting the entrance to the hill where *Bilim Ağacı* was first placed. It would take the visitor to *Bilim Ağacı* down the path in front of the plastic A. The gateway was used as a student entrance after *Bilim Ağacı* was relocated. It was used as a pedestrian crossing with turnstiles after the 2000s. This passage is now closed and serves as a waiting area for students.

1-Faculty of Arts and Science Lecture Hall Block
2-Faculty of Arts and Science
3-Faculty of Architecture
4-Faculty of Engineering



Figure 4.19. Traces of steps throughout campus (Produced by Author).



Figure 4.20. Details of the gateway and stairs (Produced by Author).

Embedded Projector Pit

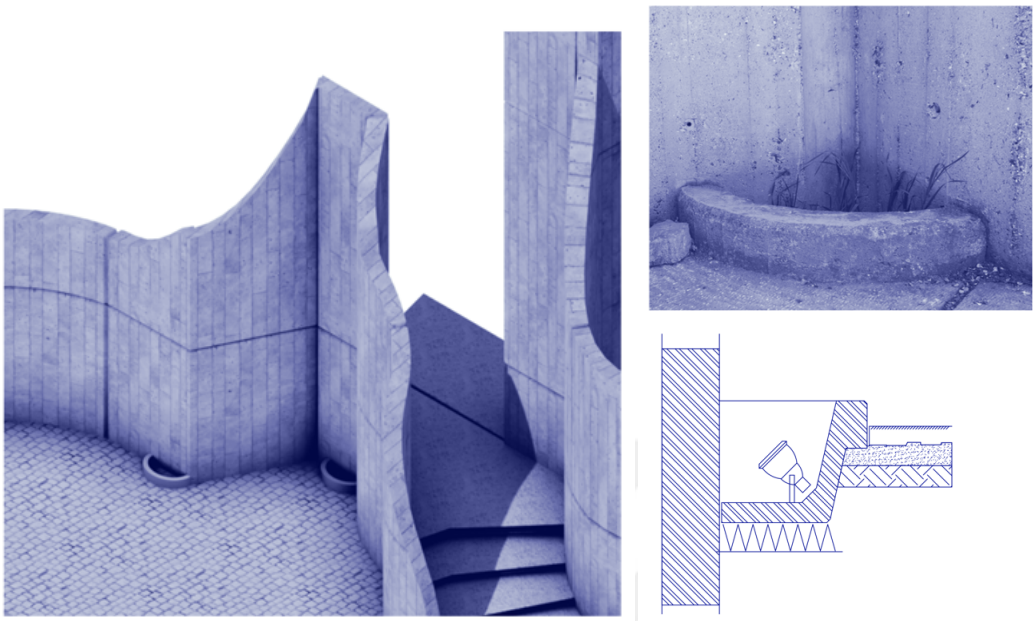


Figure 4.21. Embedded projector pits and system section (Produced by Author).

The illumination of interior and exterior spaces, structures, and works of art on campus has been considered a design problem. The lighting of the gate is as delicately thought as the rest of the campus. In terms of this, embedded projector pits are an important component that constitutes the gate (Figure 4.21). There are four embedded *concrete* projector pits. In the second layout, two pits were drawn in front of plastic A and two pits in front of plastic B. Projectors that illuminate the plastics were placed in these 55cm deep, 75cm diameter semicircular pits. Projectors were defined as underwater projectors in the 1/10 scaled system drawing, and concrete, blockage, and drainage layers were drawn beneath the pit. These embedded projector pits are thought to have been designed as lighting pools. It is intended to illuminate the plastics from below. Probably, the texture finishings of the gate would have been perceived more dramatically in this manner. These projector pits have now been planted and filled with soil. These pits, which conceal the lighting element, are similar to flowerpots used as structural elements at the campus today.

Security Room

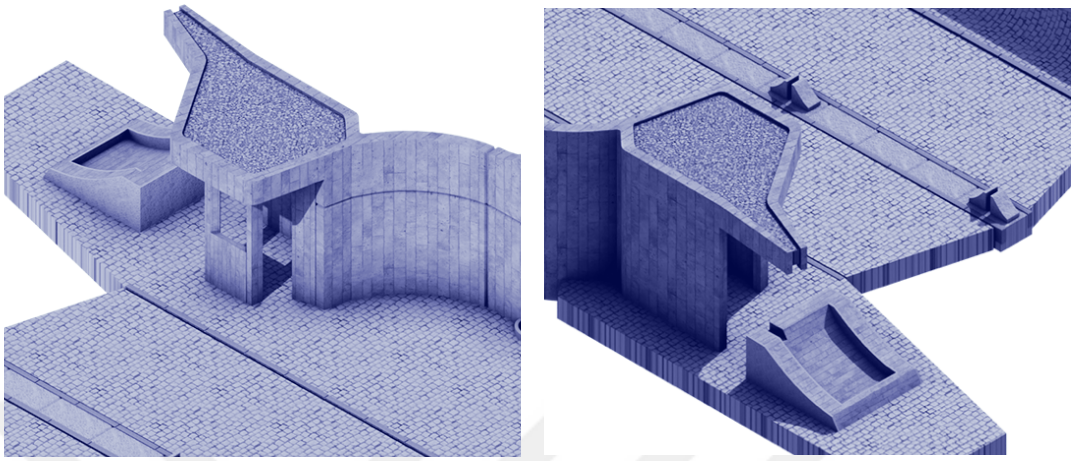


Figure 4.22. Security room, 1969 (Produced by Author).

Security room can be defined as the gate's only enclosed/interior space. The first design for the room was developed and implemented in 1969. However, due to the lack of usable space, an extension was required, and an expanded new plan was proposed and implemented in 1973 (Figure 4.23). The southward extension of Plastic B formed the security room's south and east facades. The south and west facades were revealed from plastic B expansion. The interior space created by plate expansion is reminiscent of other campus structures. While the original design of the expanded facade was flatter, the revised design curved it. The massiveness of the concrete plastic of the security room was weakened by specific patterns revealed by the construction method. Dynamic patterns were created on the surface of the artifact using joint gaps formed by molds and junction points of the parts in the same way that other elements that comprise the gate and all other parts of the campus are (Figure 4.24). The security room had been expanded with additional structures over the years. A major intervention was made in 2004 and all the additions were removed to transform the unit into its original form. The way the openings are used is another important fertile detail that enhances the dynamism of the concrete plastic of the security room. This was made possible by the volume-mass relationship created by them as well as the pattern, and the details contained within them (Figure 4.25).

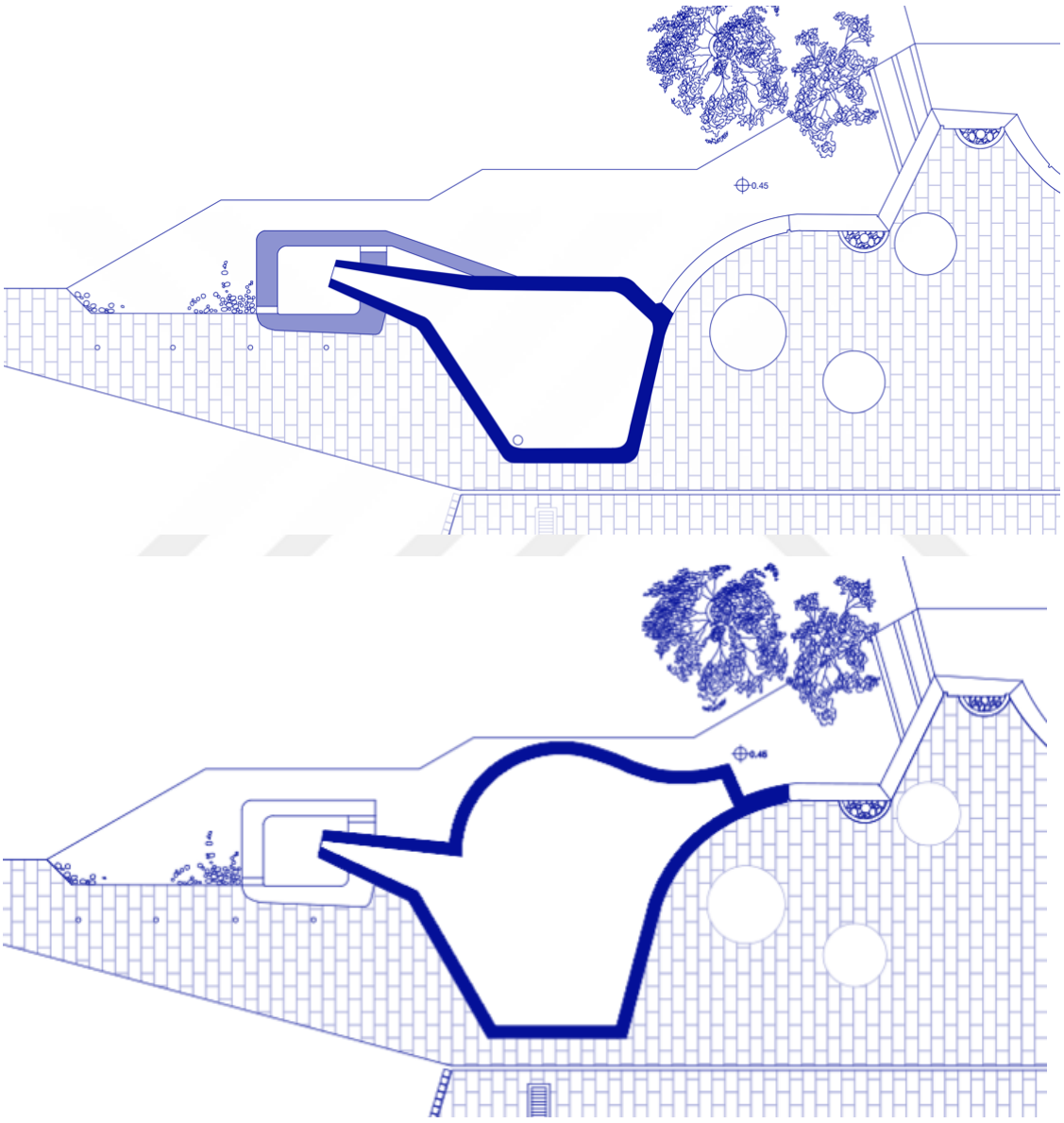


Figure 4.23. Security room plans dated 1969,1973 (Produced by Author).



Figure 4.24. Material and lighting element details (Produced by Author).

The slender windows on the west facade can be observed in the architecture faculty, the library, and many other buildings on campus. On the west facade, the repetition of windows added dynamism and structural ornamentation. The traces of other buildings' dynamic volume-mass relationship could also be seen here. The windows on the eastern facade have been carefully drawn up to their frames, and it is clear from these drawings that these frames are intended to create a pattern. Extended windowsills, designed as a counter facing the vehicle road, become a sitting element like in the architecture faculty. As a result, this is a fertile detail.

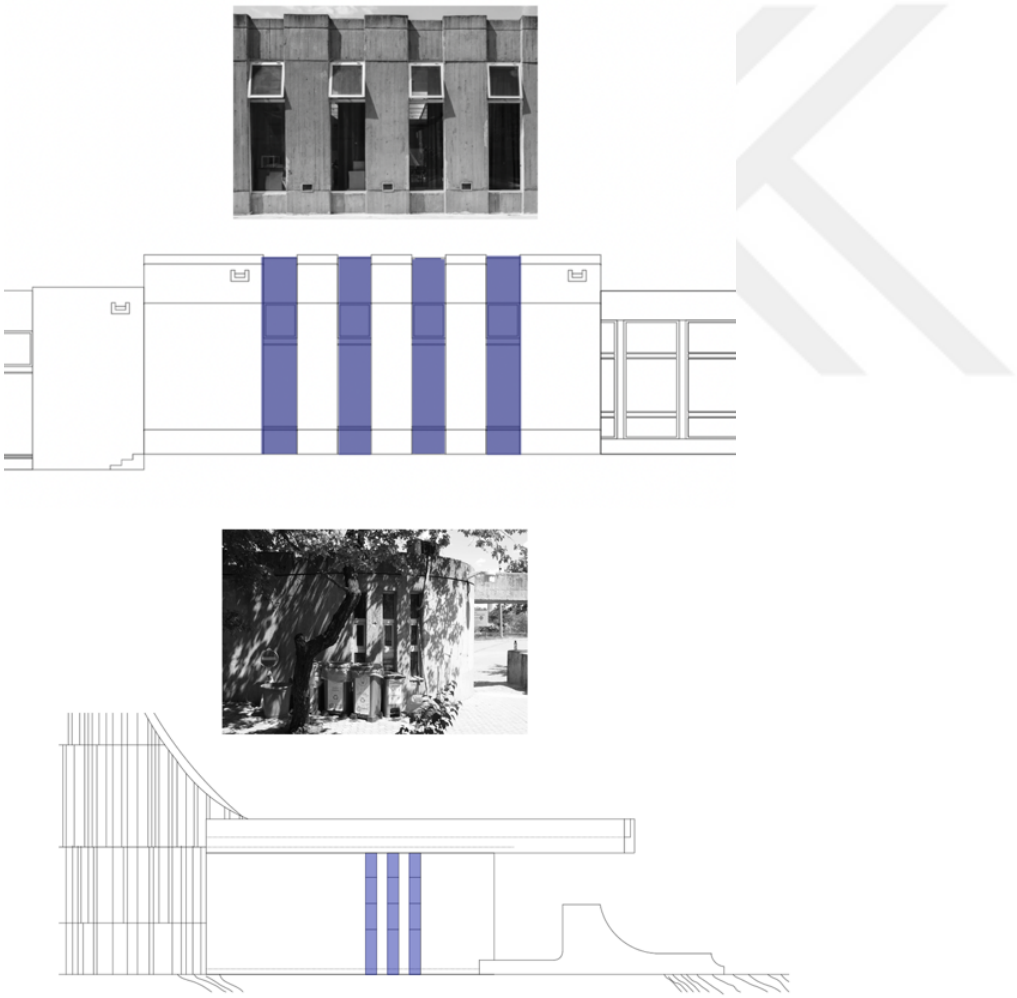


Figure 4.25. Window patterns faculty of architecture and security room facade (Produced by Author).

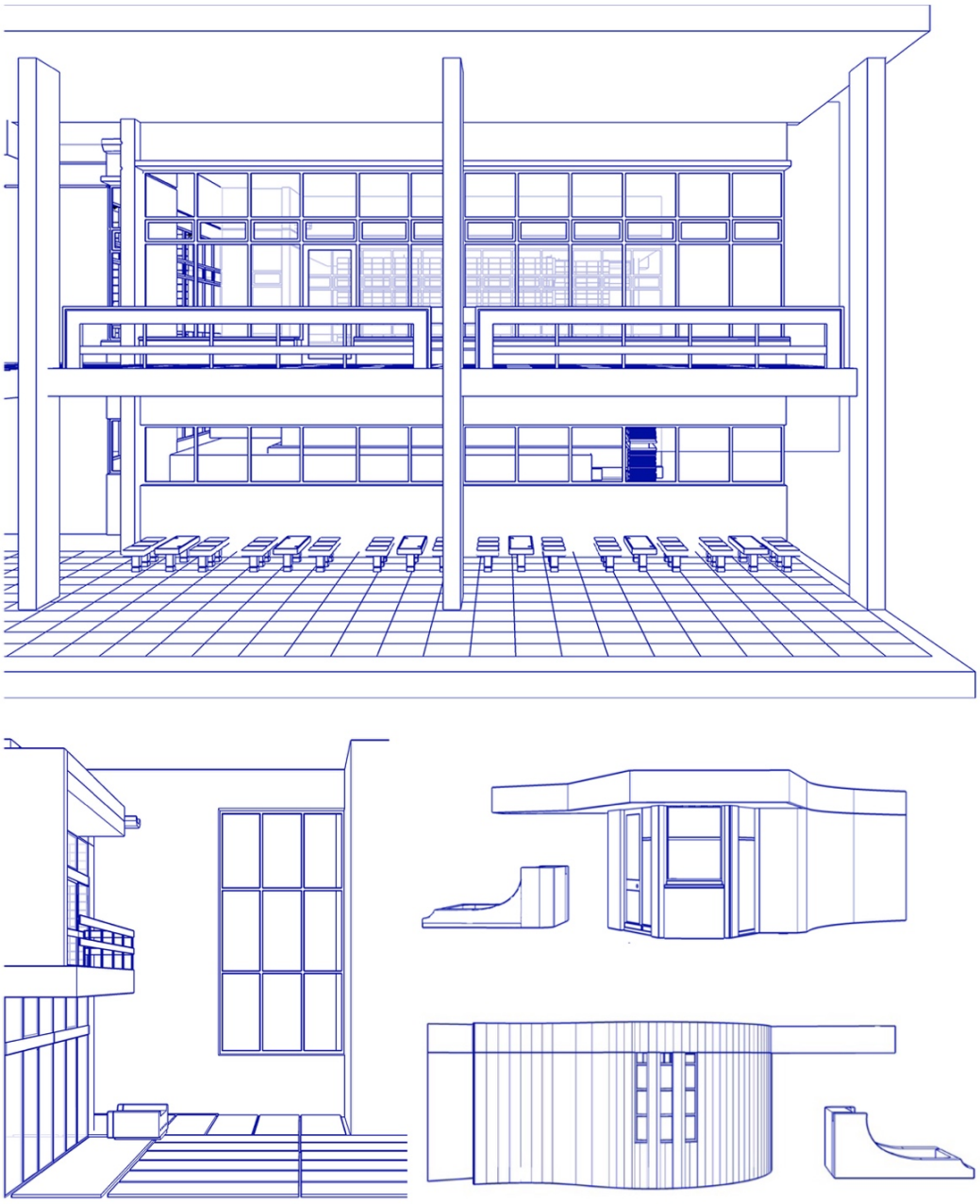


Figure 4.26. Frame patterns: above and left bottom faculty of architecture facades, bottom security room facade (Produced by Author).

As in the other buildings on the campus, the interior space was subtly designed together with the exterior. The concrete outer surface continues on the ceiling and walls. The floor was covered with terrazzo, the additional walls of the security room were made of brick and were covered with only plaster, and marble was used on the windowsills. Mentioned materials and their finishings were used repetitively in many interior spaces on the campus. In the drawings, the interior design of the room is also precise (Figure 4.27). The structural furniture found in every building on campus can be found here as well. There is detailed structural bench seating in leather and wood, built-in cleaning and document cabinets, and document shelves along with a cardholder. The room's lighting and heating systems are solved on the ceiling. It is heated by an electric heater mounted on the ceiling, and lighting is provided by four recessed luminaires. This type and form of lighting solutions continue in every building on campus.

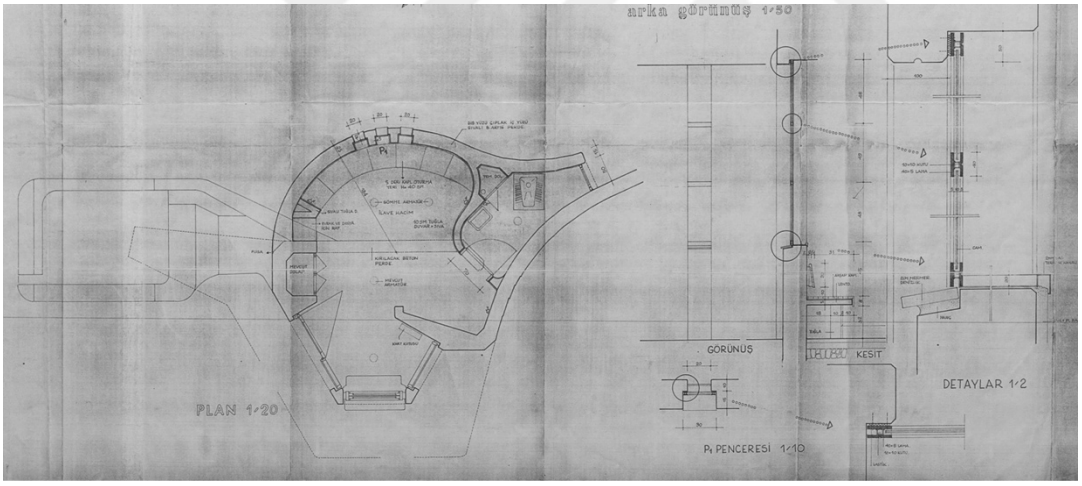


Figure 4.27. 27 Interior Design of the Security Room, 1973 (Altuğ-Behruz Çinici).

Behruz and Altuğ Çinici's architecture is based on the physical and visual interaction of the interior spaces with the landscape. Windows depicts nature by incorporating it into the frame it creates. Like a painting, it invites the outside in.



Figure 4.28. Security Room, 2022 (Produces by Author).

Gargoyle and Water Bowl

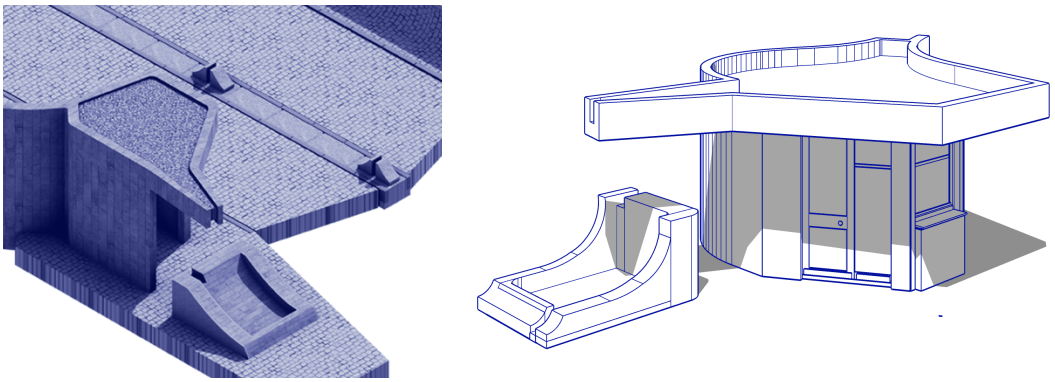


Figure 4.29. Gargoyle and Water Bowl 1963-1973 (Produced by Author).

The reinforced concrete gargoyles are one of the details that stand out on the campus. It also appears as an important detail on the gate. It was designed to transfer the water that would accumulate on the security room's flat roof to the bowl beneath it. Only the gargoyle of the gate was formed by the continuation and rupture of the roof, whereas the majority of the gargoyles have an articulated structure that slides into the facades of the campus.

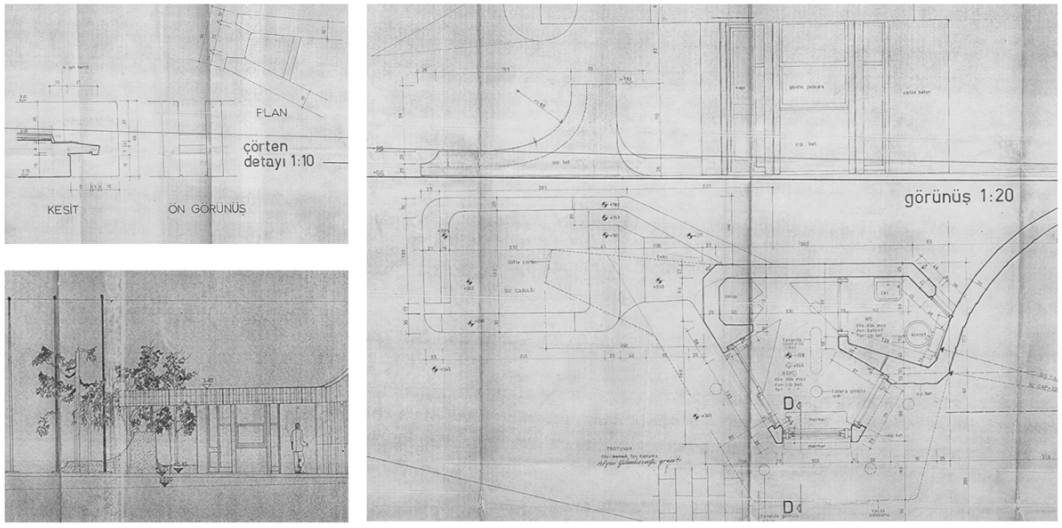


Figure 4.30. Detail drawings of the gargoyle and water bowl, 1963-1973 (Altuğ-Behruz Çinici)

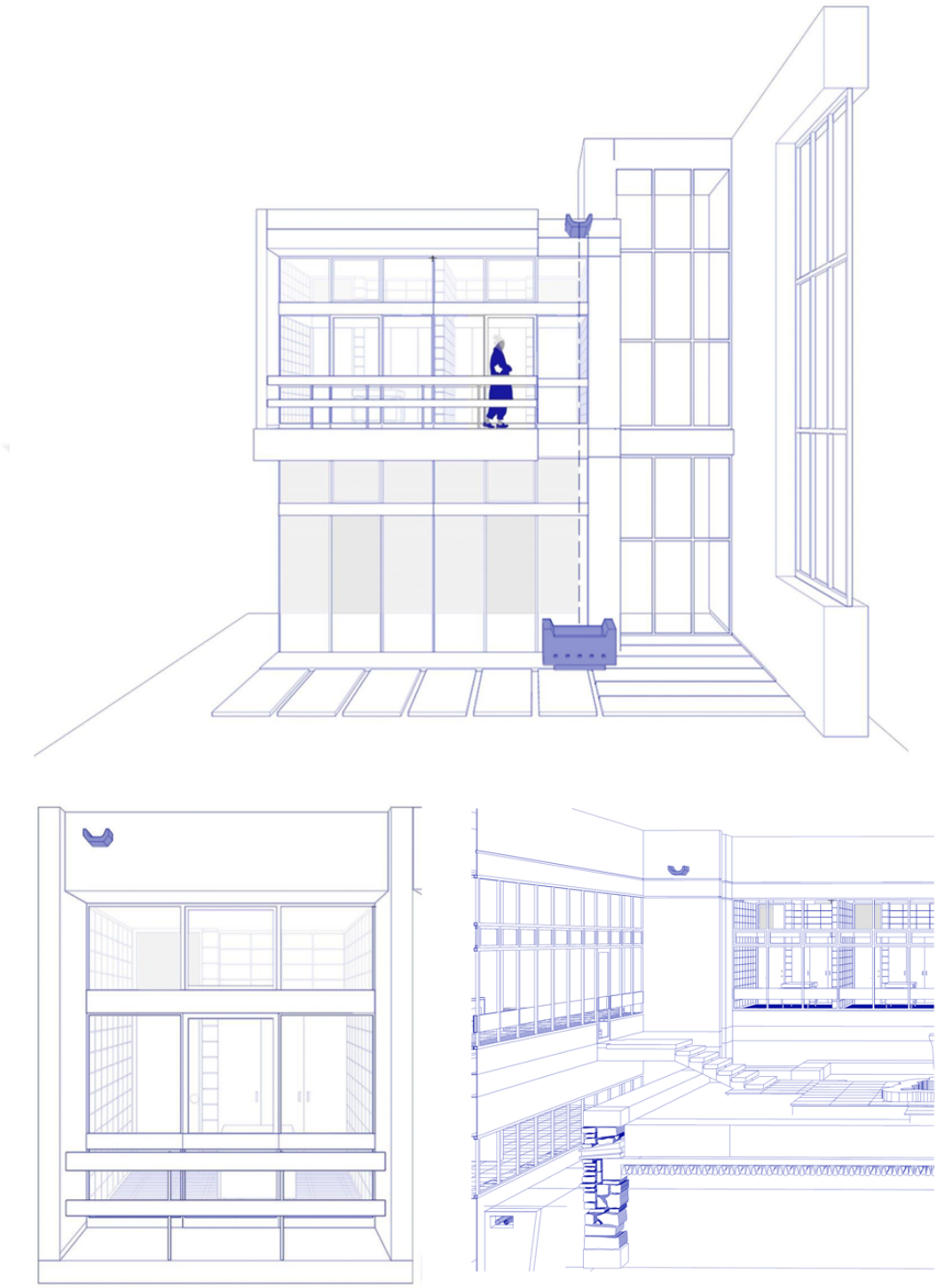


Figure 4.31. Gargoyles and water bowls from campus; faculty of architecture (Produced by Author).

The water bowl is depicted in the drawings as a spreading element, but when viewed *in situ*, it appears that it is not implemented as in the drawings. Contrary to the drawings, it is a separate element that does not touch the security room. Traces of the curved geometry of the gate continues in the cross-section of the water bowl. Unlike the other complementary water bowls on the campus, its scale has a significant impact as an architectural element on its own.



Figure 4.32. Current situation of gargoyle and water bowl, 2022 (Produced by Author)

Refuge and Lighting Element

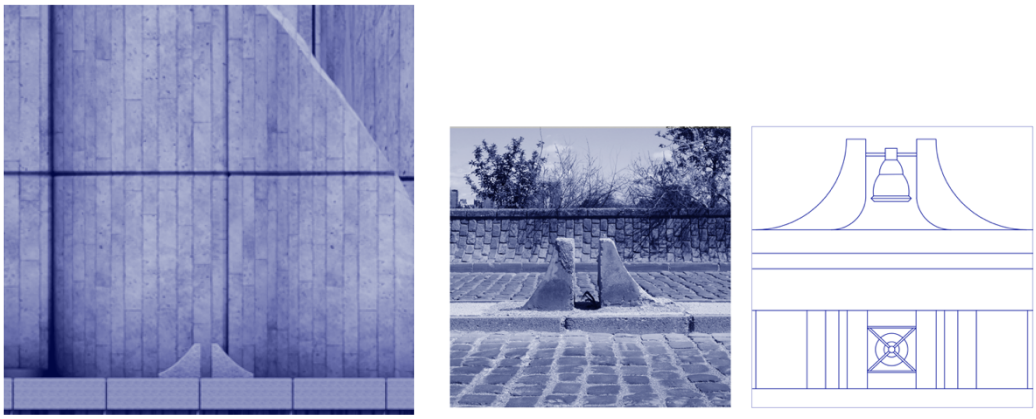


Figure 4.33. Refuge Lighting Element, current situation, top and front view (Produced by Author).

A 34-meter-long and 1-meter-wide refuge is designed for the intersection of the vehicle entry and exit roads. The middle band of it is made of ribbed concrete mosaic (travertine brass and white), while the first belt surrounding it is made of "*afyon yılanlıocağı*" granite. The border around the granite is also drawn on the layouts as a scalloped mosaic. However, the design that resulted from the material difference was never implemented. The refuge is entirely made of ribbed concrete mosaic with joint gaps between defined belts.

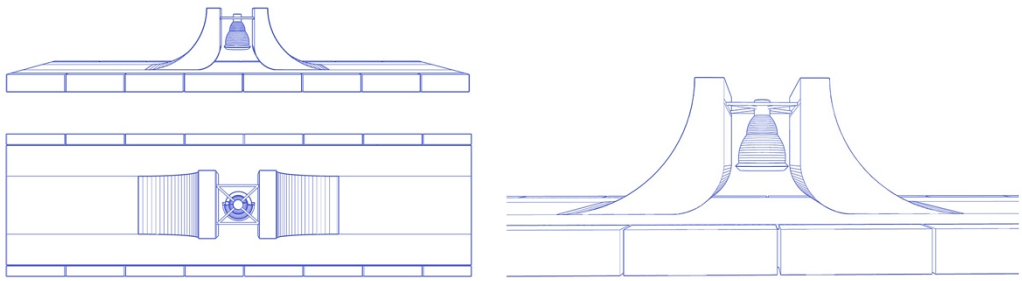


Figure 4.34. Refuge Lighting Element Details (Produced by Author).

Six lighting elements were designed and applied that exploded from the refuge middle band. Only five of them are still standing today. Between the exploded concrete pairs that form these lighting elements, an iron frame is located, and the projectors that will provide the lighting are placed on them. The projectors are oriented toward the ground, indicating that the lighting reflected from the ground was planned. This drawing reveals that, as seen with the embedded projector pits, it was aimed that the entrance would be perceived dramatically, with the projectors designed to be placed subtly. The lighting in the campus's indoor and outdoor areas has been meticulously planned, with lighting elements designed to resemble sculptures. The embedded projector pits and lighting on the refuge are the clearest representation of this on the gate.



Figure 4.35. Refuge Lighting Element Current Situation (Produced by Author).

Pedestrian Walkway, Parapet, and Vehicle Road

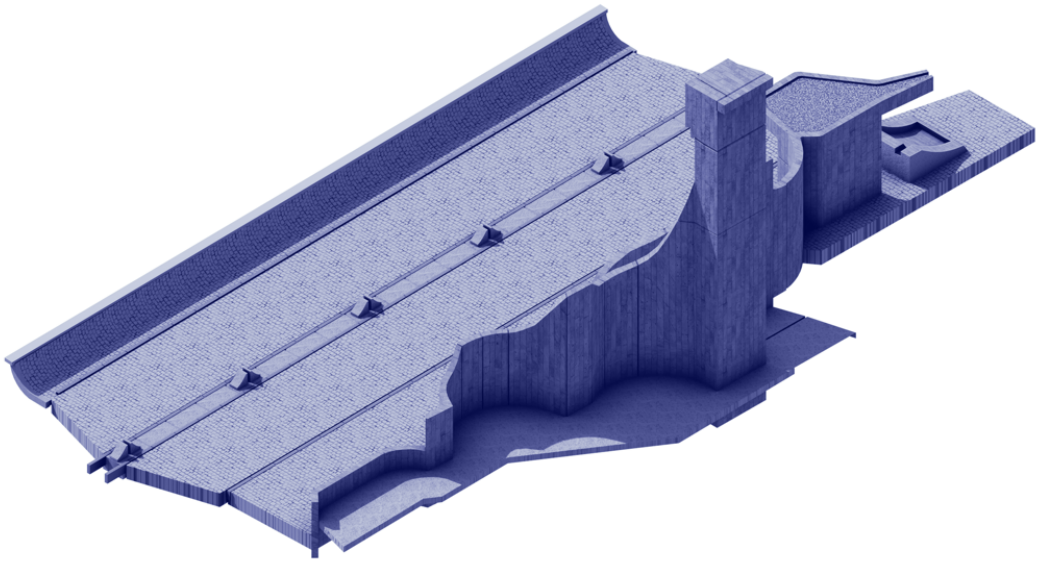


Figure 4.36. Pedestrian Walkway, Parapet and Vehicle Road (Produced by Author).

The vehicle and pedestrian paths, which are precisely defined in the drawings, are other significant elements of the gate. These roads, which are separated from one another by using different methods of making the same material and use of height, represent the ground games on campus. The material of the roads in the layouts was originally made of basalt, but this was changed later. The material to be used for road paving is *Afyon Yılanlıocağı* granite in 20x50 or 20x40 modules. Although these three roads use the same material and have the same flooring/construction style, small nuances are used to distinguish them. The pedestrian paths in front of the A and B plastics and on the left side were cut off from the vehicle road by raising the 0-level vehicle road by 10 cm. The intersections of these roads are separated by concrete curbs drawn to the borders.

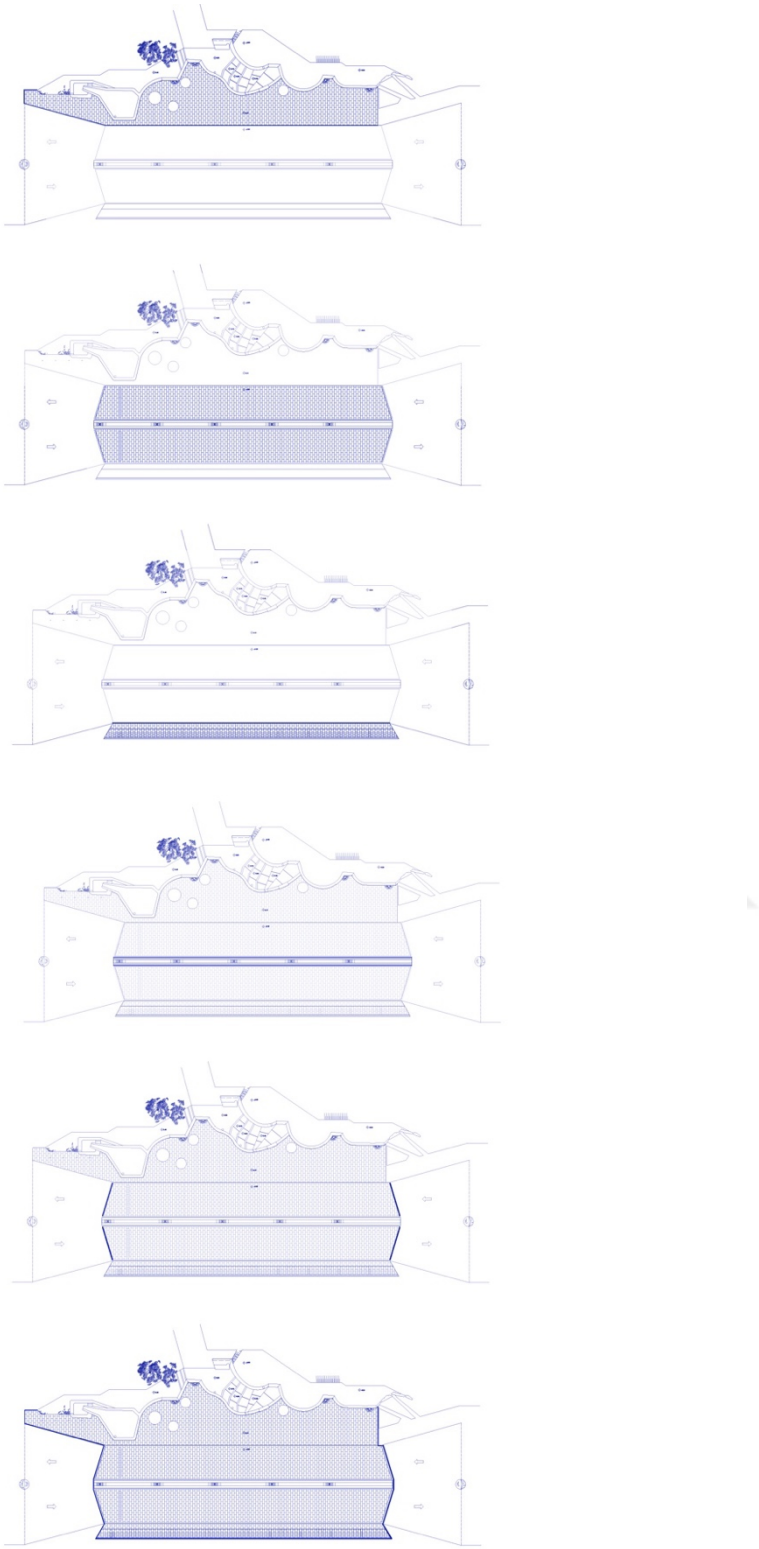


Figure 4.37. Defined areas, patterns and boarders of the floor covering (Produced by Author).

The floor slab boundaries of these roads define where the volume of the gate begins and ends. The road's and walkway's pavement borders define the gate and the non-gate volumes. The vehicle road is distinguished from the asphalt roads by colored parquet borders. A border is provided on the pedestrian road on the left either. Unlike the path in front of the plastic, the concrete border on this side extends to the parapet that curves the pedestrian path. The fact that the pedestrian paths designed in conjunction with the gate were 10 cm above ground level and were limited by concrete curbs revealed the gate's starting and ending points since there was no existing pavement or ongoing pedestrian path at the time the gate was built.

Another important detail of the vehicle road is the embedded barriers designed near the road's southern border. This barrier system, whose working and mechanical systems are also defined in the layouts, refers to the variety of new technologies (central heating system, etc.) on the modern and contemporary campus. The barriers work together with the guardhouse. Alongside the mechanical aspect of the duty, buried barriers have a defining role. Instead of being placed on the eastern border of

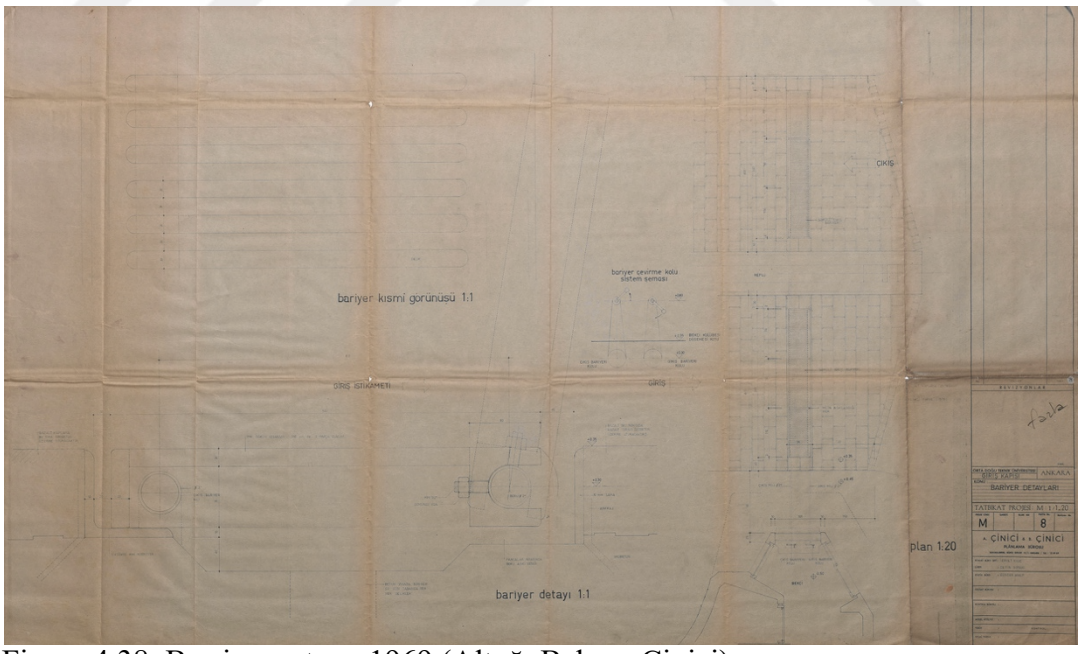


Figure 4.38. Barrier system, 1969 (Altuğ, Behruz Çinici).

the area defined by the gate; the security room was placed close to the border opening to the campus. The architects ensure that the gate is experienced by those who come into this in-between space before entering the campus. Even though they are unable to experience the whole, they will have seen the representation of it while spatially experiencing a fraction of it.

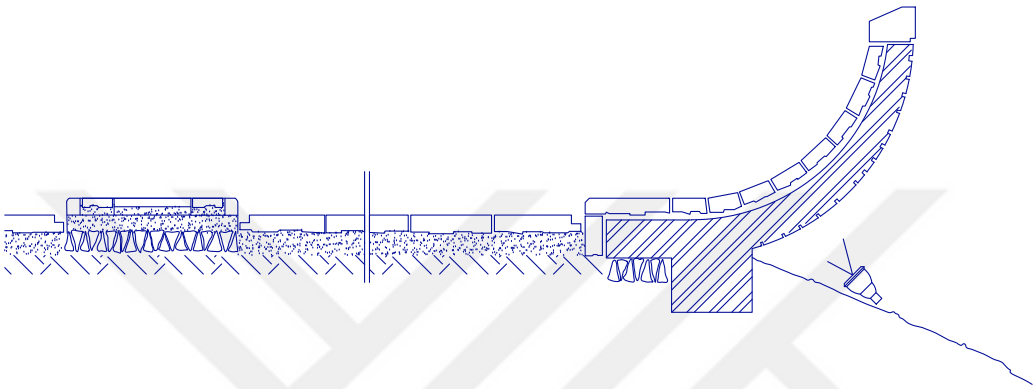


Figure 4.39. Section of paved pedestrian road (Produced by Author).

The inflection of the pedestrian road on this axis forms the parapet, which defines the eastern border of the gate (Figure 4.39). This slope, as subtly defined in the A and B plastics, not only created dynamism but also represented many buildings and elements on campus. As previously stated, the campus has inflections on a variety of scales. These inflections sometimes complete a space and sometimes create a pattern, but most importantly, they diminish the massiveness of the exposed concrete. As the pedestrian path bends, the pattern of the granite material covering the road changes. The 20x40 granite modules curled together with their bases as the surface folded until they reached the coping. This parapet is attached to a coping via a thin joint gap. The coping is made of 20x40 cm concrete blocks with subtle joint lines. Although the alignment of the stones forming the pavement is maintained in the drawing by these joint lines, this alignment could not be achieved *in situ* (Figure 4.40). This floor covering play on the gate effectively represents the use of materials as well as the logic of floor covering on campus. The floor covering, and how it is

made, define the campus's areas, spaces, and borders (merging, dividing). It was used to define open, semi-open, and closed spaces. Certain flooring patterns persisted in areas where specific actions occurred. While walking around campus and experiencing it, the change in flooring gives the user the impression that he has moved to a different place, either spatially or functionally. The same can be said for material plays on the campus's other horizontal and vertical surfaces. A lighting arrangement for the eastern axis was created in addition to the dramatic lighting designed for the right and middle axes of the door. Projectors hidden on the sloping surface behind the parapet provide illumination. The light reflected by these projectors will be scattered on the concrete back of the parapet, forming a light beam behind it. In this case, too, diffused dramatic lighting is used rather than direct lighting.

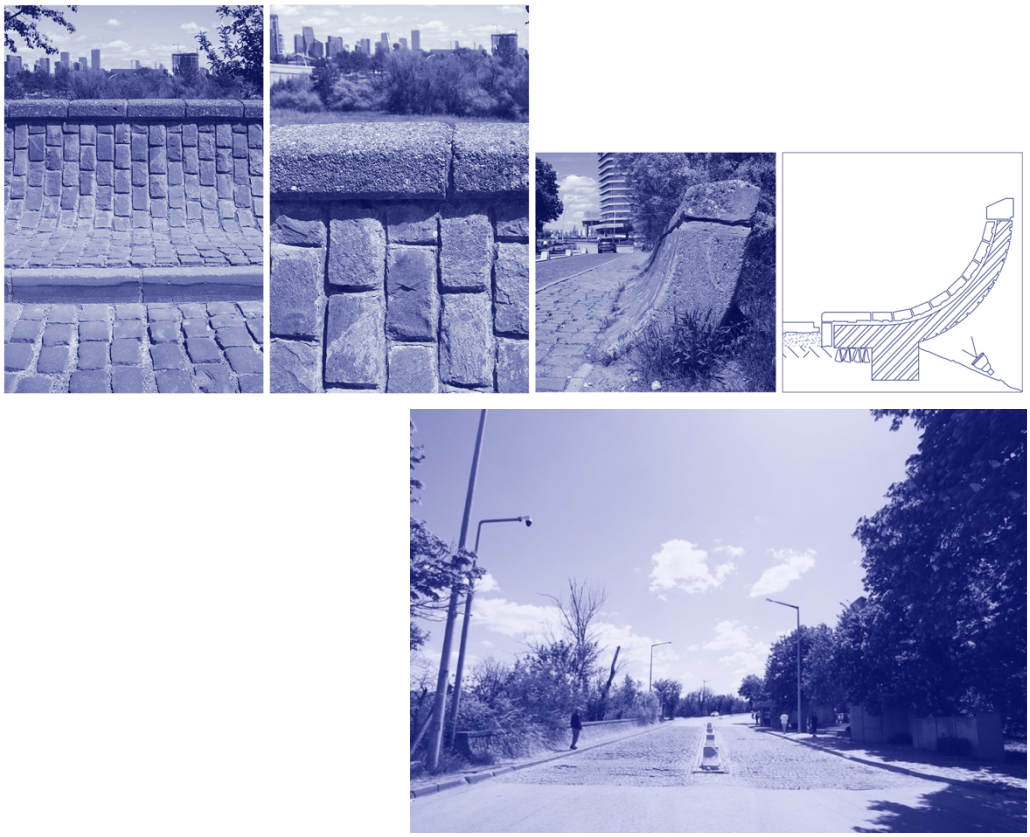


Figure 4.40. Overall view and details of pedestrian walkway, parapet and vehicle road (Produced by Author).

Concrete Bollard Light

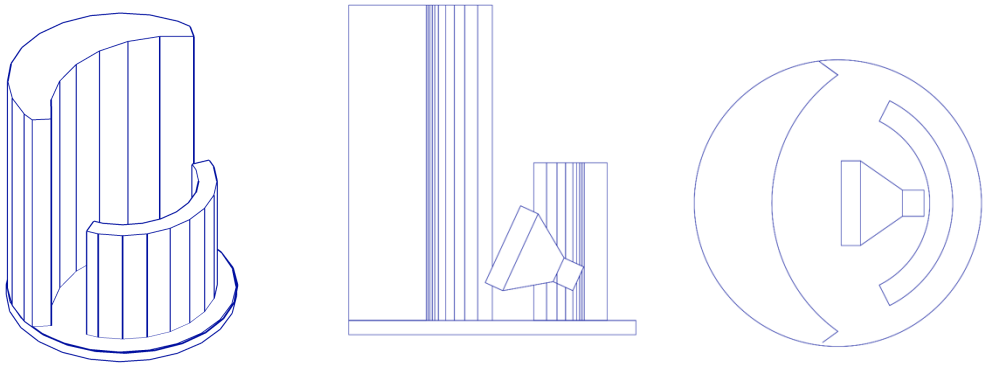


Figure 4.41. Concrete bollard light (Produced by Author).

On the refuge axis, on the entry and exit roads, 100 cm diameter, and 115 cm height two concrete bollard lights were designed. These elements can be said to define the knots of the gate's north and south borders. These sculptural lighting elements are also made of concrete. Reflective lighting was designed for the projectors, which were placed inside the exploded semi-circles. However, in-*situ* research reveals that these lighting elements were not implemented.

4.4.2 Gate A1 and Campus Landscape

The METU campus was designed with the goal of being a self-sufficient environment with all types of student facilities and a striking landscape, which emerged alongside the campus's massive man-made forest. The campus's comprehensive design is shaped by its master plan, the individual architectural values of each building, its sublime communication using landscape as a medium, and the landscape itself with all of its elements and structures. Despite its meticulous planning, the campus's forest, landscape, and design contribute significantly to its cohesiveness and consistency. The manifestation of this is also visible at the A1 gate.

The gate merges in with the existing topography. The existing topography has created a stairway/passage between plastic A and B. The campus landscape begins right next to this gate. Behind the B plastic, there is a second passage that leads to part of the forest. When the gate was first constructed, there was no existing tree at the site. The trees surrounding the gate emerged with the campus's afforestation.

The gate has become invisible from afar with the growth of the trees around it over time (Figure 3.42). On the other hand, the trees surrounding the gate gave it a new expression. The greenery concrete-brick harmony on the campus is also clearly seen at the gate. As in the whole campus, the architects designed the trees together with the architectural elements. During the day, new textures are formed on the existing textures with the shadows created by the trees (Figure 3.43). Trees, whose leaves and colors change with the seasons, allow the gate to give different images periodically.



Figure 4.42. The evolution of trees over time, 1950s, 1990s and 2020s.



Figure 4.43. Shadows of the trees on the textures of the Gate (Produced by Author).

4.4.3 From Campus to Gate: Continuing Narrative Details

The whole can be constituted and defined by the way details are assembled and overlap with one another, as well as by all of the various coherent parts that exist.[66] METU's campus is an outstanding illustration of this. Its organization on the largest scale is highly reliant on the well-defined structures of the elements on the smaller scales. The campus is composed of details that repeat, continue, and spread at various scales. Architectural details have many different architectural functions in different designs, and their precise functions are unknown until they are used in different designs.[67] Details have diverse architectural functions, ranging from the direct to the indirect understanding of their meaning. Only after detail has been utilized in a design will its function be known. Representation is the function of detail in a design. It is utilized in another design to make the function clear. It is a creative catalyst when it is re-used. As mentioned earlier, the same details are utilized across the METU campus. Details are used repeatedly in different artefacts on different scales; therefore, their functions are known on the campus. This knowledge allows the architect's intentions to be determined through repeatedly used details. The details in the campus repeat themselves in each part, and their purposes in these parts are understood when viewed overall. These details were examined based on the reading made on the A1 gate, and the traces of the campus represented in the details were attempted to be read.

Geometric Narrations

The massiveness of concrete has been fractured by exceptional geometric use of details, particularly curved forms, openings, and volume-mass relationships. These architectural nuances and elements turn the concrete structure from a pure massive

[66] An extensive study was done by Seray Türkay Coşkun under the supervision of Prof.Ayşen Savaş. Further information: Part and whole: A mereological framework for architectural form, unpublished PhDThesis, METU, 2017.
[67] Frascari, "The Tell-the-Tale Detail," 1981.

element to a dynamic element throughout the campus. Inflection as details on campus is frequently a visual implementation phenomenon, while others are the result of design decisions made for functionality purposes.



1- Curved edge of lecture hall block, faculty of arts and sciences.
2- Front facade, department of civil engineering K4.
3- Stair hall, library.
4- Entrance eave, faculty of arts and sciences.
5- Interior stair hall, faculty of arts and sciences.
6- Entrance walkway, chemical engineering department D.
7- Facade of lecture hall, faculty of arts and sciences.
8- Outdoor pool, library.

Figure 4.44. Different geometries on campus (Produced by Author).

Material Narrations

The massiveness of concrete has been fractured, ornaments have been created, and spaces have been defined on campus by intelligent usage of the materials, the combination of different materials, the usage of different sizes, and the usage of different finishings of the primary materials.

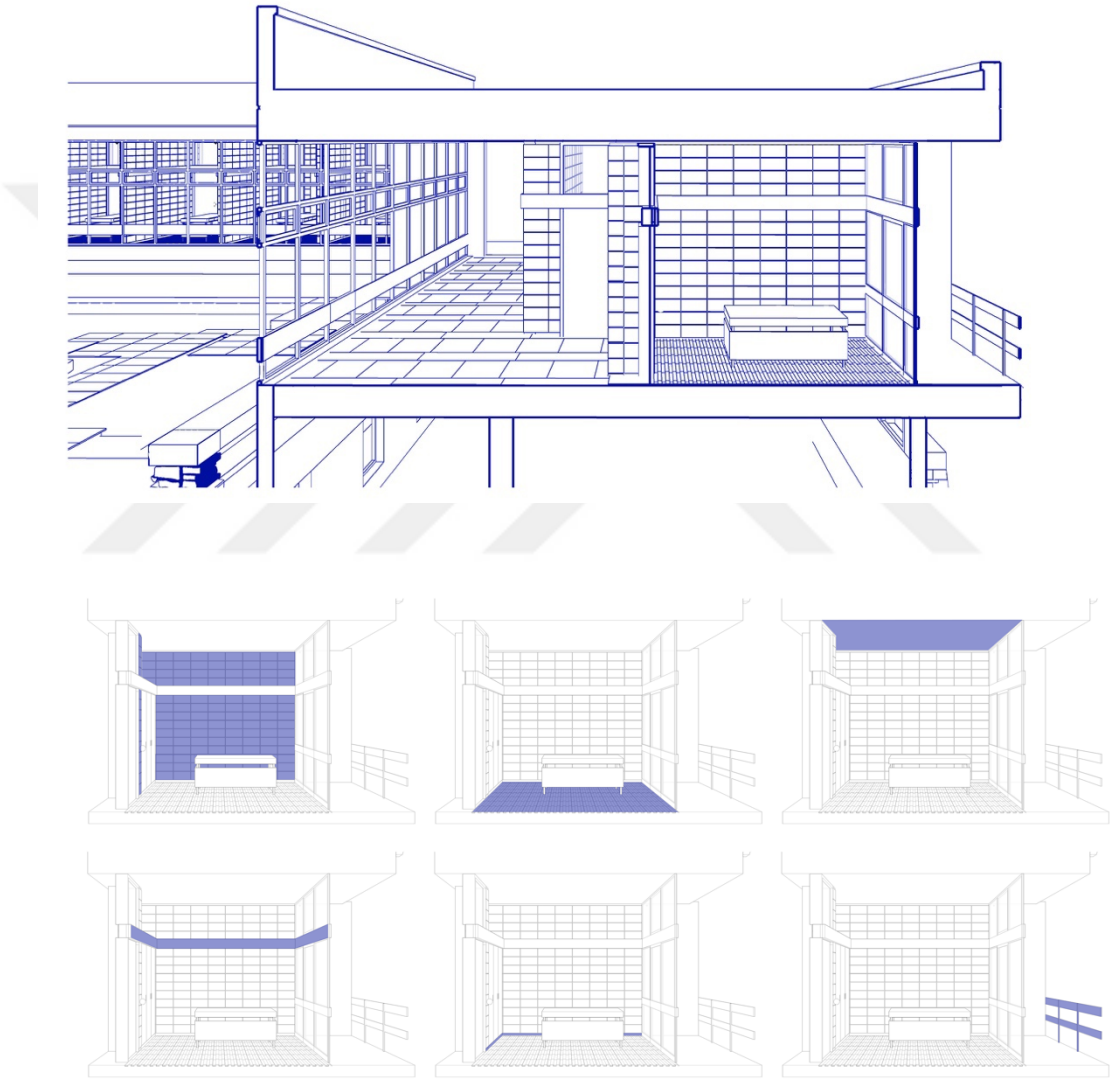


Figure 4.45. Different construction techniques of materials and material differences defines spaces, above faculty of architecture professor block and bottom professor room (Produced by Author).

Volumetric Narrations

The unique quality of the volumetric space on the campus reveals itself in the meticulous details. These details depict various formations floating from public to private, inside to outside, and defined space to another defined space. Delicately usage of the plates, textures, materials, and geometry reveals volumetric narrations.

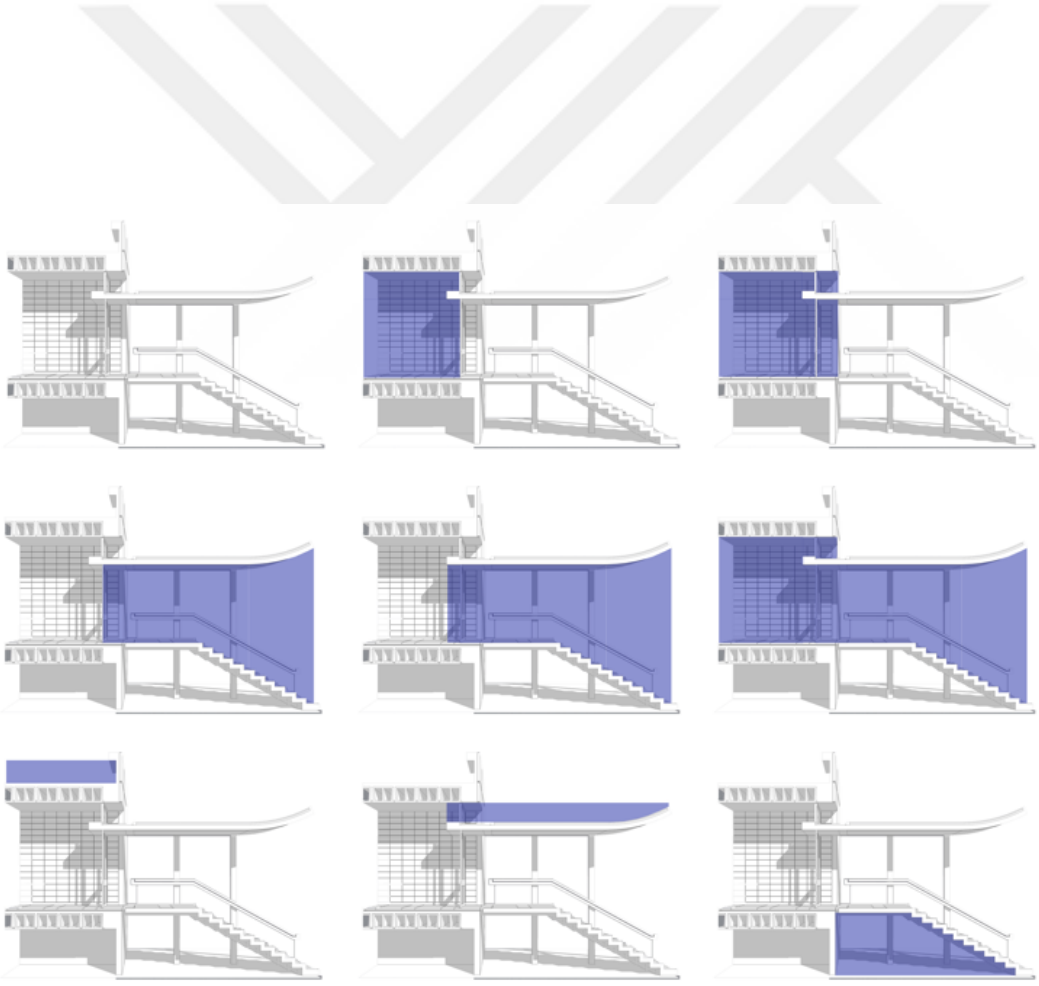


Figure 4.46. Faculty of architecture professor entrance Volumetric Narrations (Produced by Author for the course “Modern Campus in 2020).

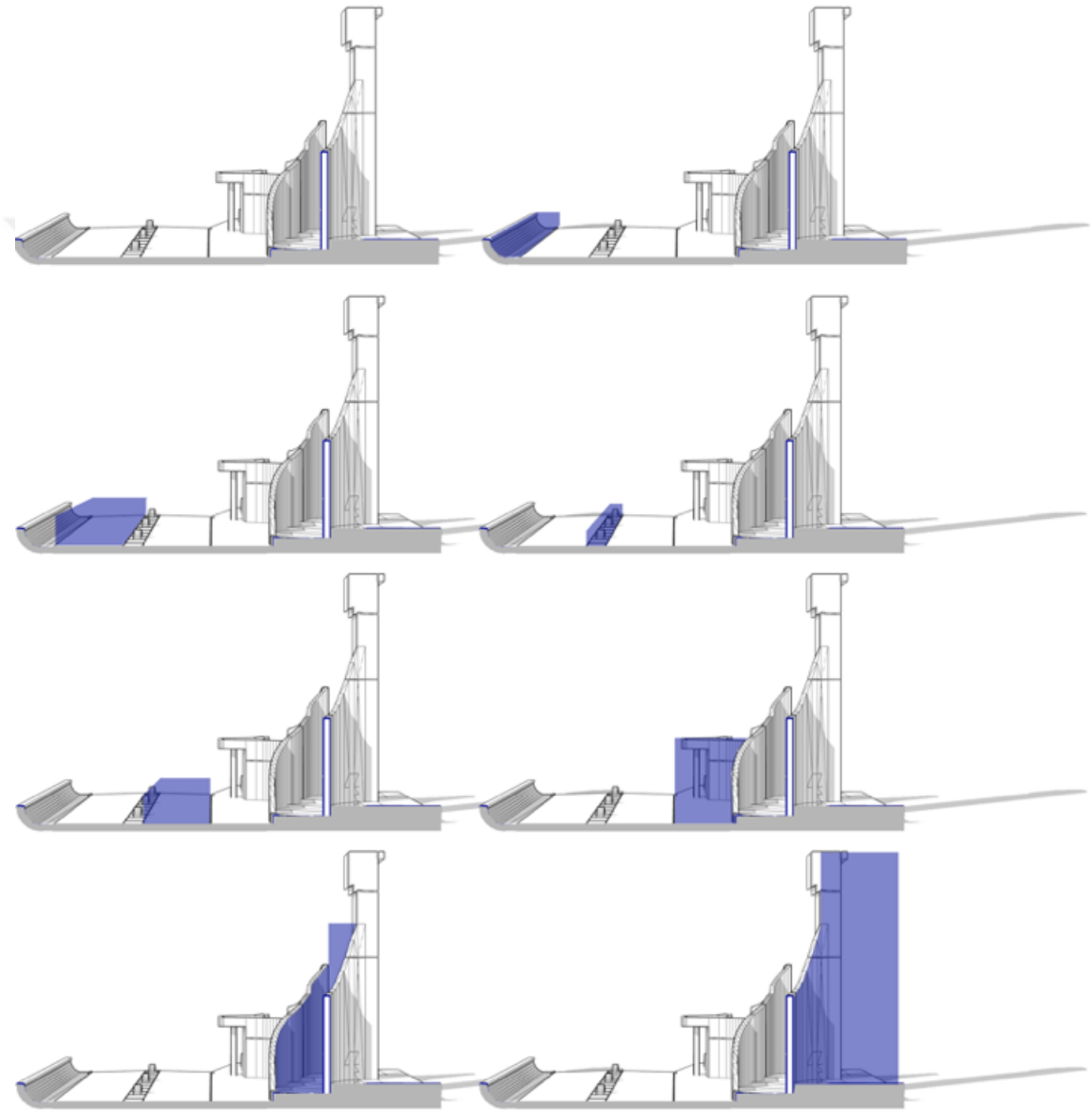


Figure 4.47. Gate A1 Volumetric Narrations (Produced by Author).

Plate Narrations

The distinctive use of plates on campus emerges in the subtle details. The details show various defined formations.

The partial section illustrates the professor entrance of the Faculty of Architecture building. Plates that define the gate, are one of the best examples to show the flow of space from inside to outside. The entrance is highlighted with a concrete eave. This overhanging cantilever plate extends to welcome the visitors approaching from the parking lot while plates that constitute the stair while inviting the visitor into the structure and lead you to the door.

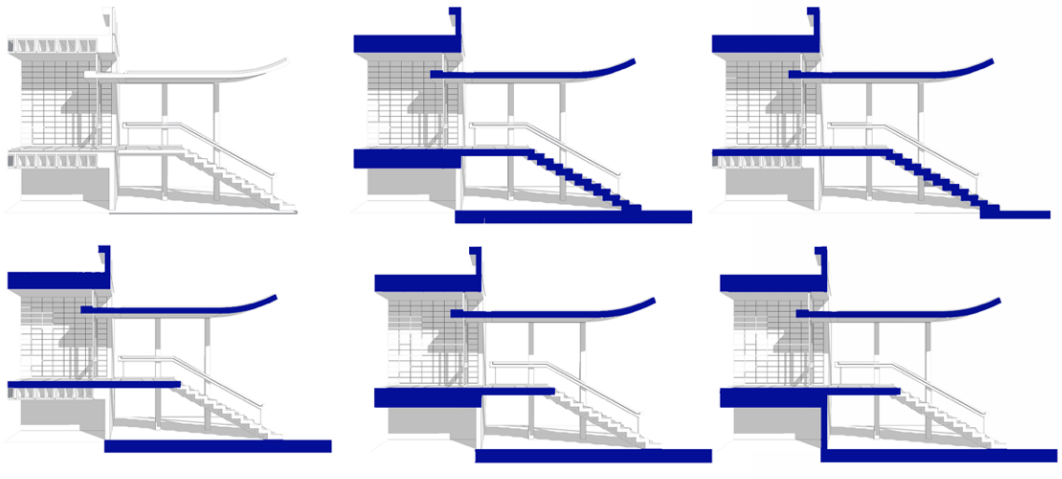


Figure 4.48. Section of professor entrance illustrates the plate narrations. The plates delineate the areas of activity at the gate (Produced by Author for the course "Modern Campus in 2020).

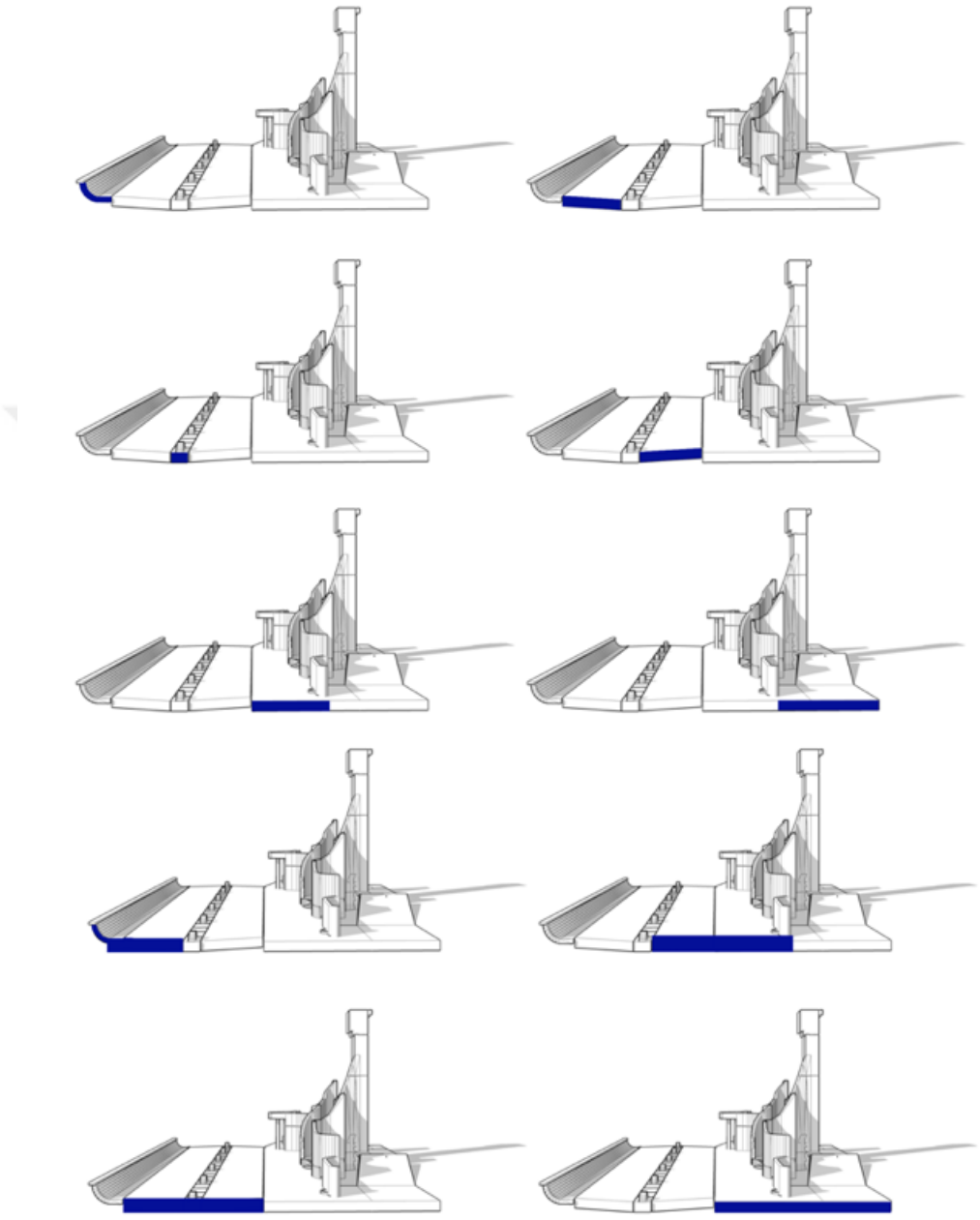


Figure 4.49. Section of Gate A1 illustrates the plate narrations. The plates delineate the areas of activity at the gate (Produced by Author).

Constructional Narrations

Details emerged from *kernform* on the campus. Without the need for additional elements, claddings, ornaments, or *kunstform*, structural and aesthetic details emerged from kernform. As a result of this, structural ornamentation has emerged on artifacts.

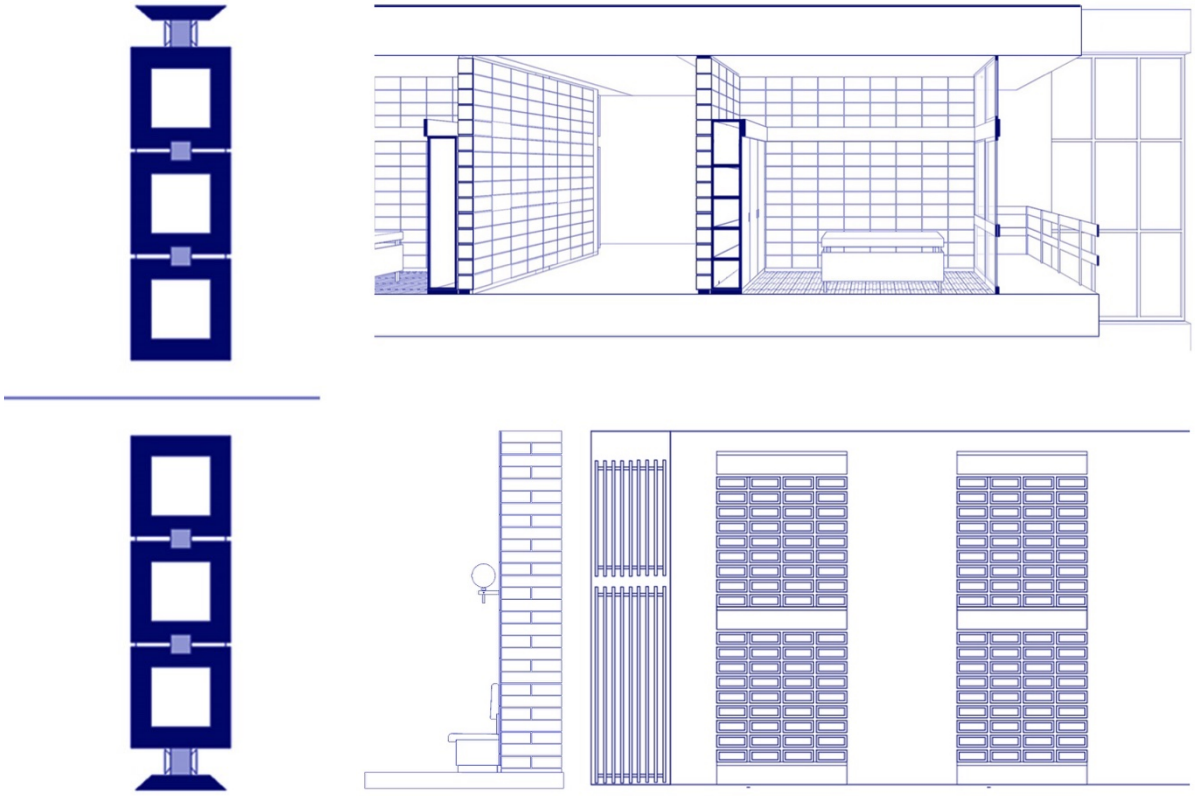


Figure 4.50. Ornamentations emerged from *kernform,* brick wall in physics department building, west facade of faculty of architecture, professor room in facult of architecture (Produced by Author).

Elemental Narrations

Architectural elements such as *brise-soleils*, gargoyles, lighting elements, lighting pools, water bowls, and outdoor furniture without any additional ornaments, are designed like sculptures that enriched the structures.

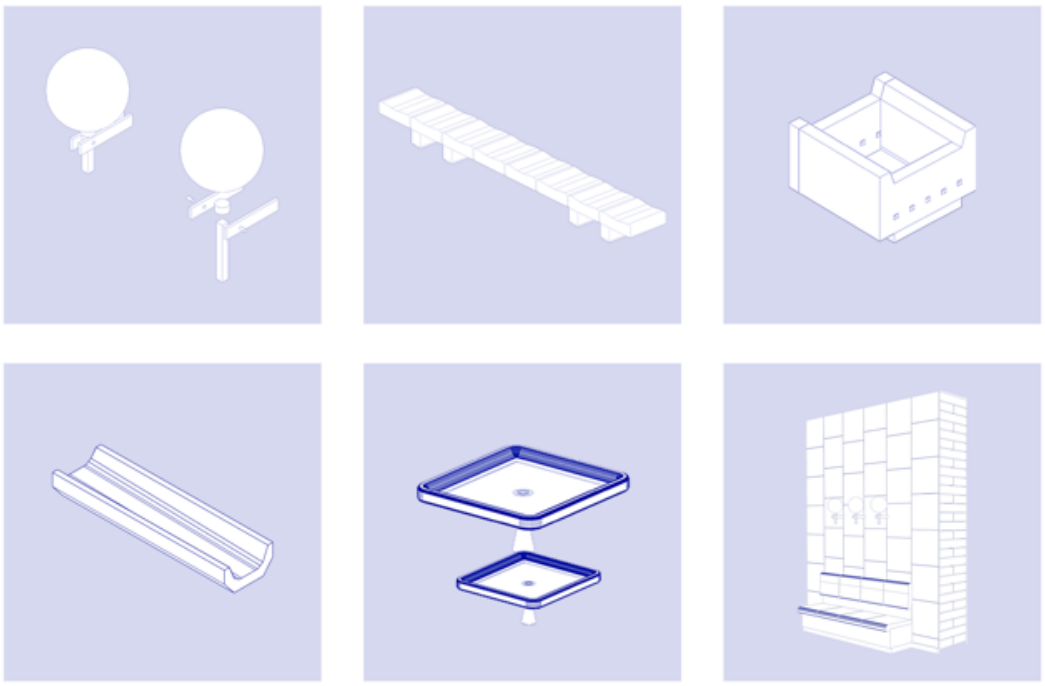


Figure 4.51. Architectural elements; bulbs, concrete seating unit, concrete water bowl, concrete gargoyle, concrete ashtrays, and seating unit (Produced by Author).



Figure 4.52. Architectural elements: concrete seating units, concrete trash bin, lighting element, 2022 (Produced by Author).

4.4.4 Original Ideas of the Architects

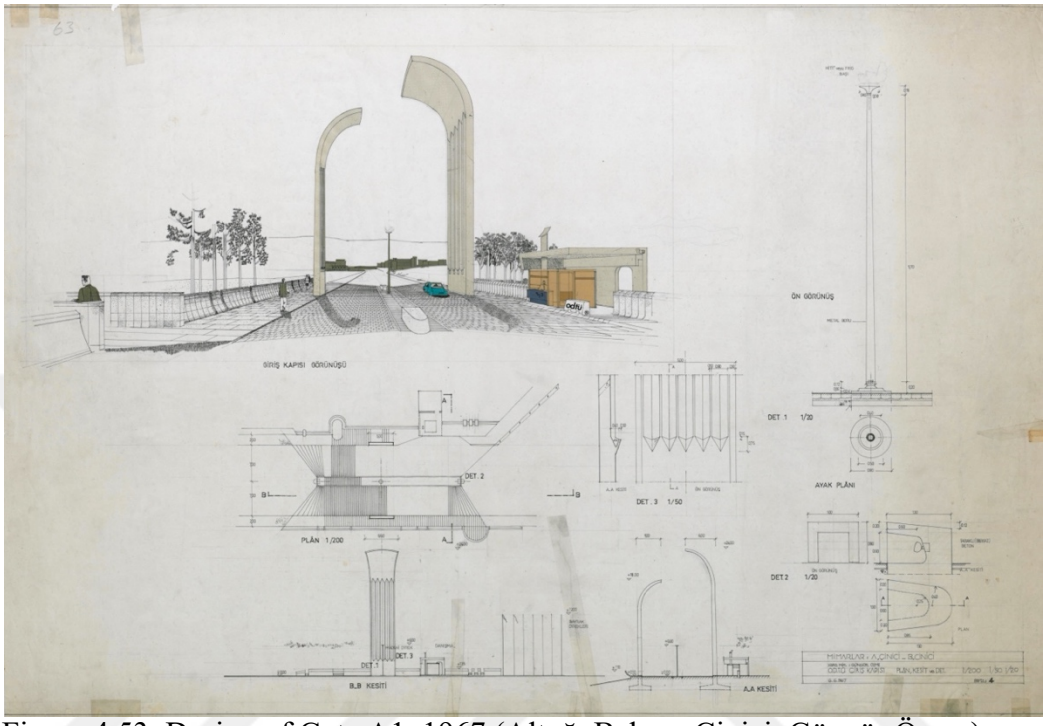


Figure 4.53. Design of Gate A1, 1967 (Altuğ, Behruz Çinici, Güngör Özme).

Altuğ and Behruz Çinici and assistant architect Güngör Özme created the first gate design in 1967, which included four layouts. Examining the drawings of this unapplied design reveals that the quality of the drawing, font, textures used on the sheet, renderings, values, and figures differ from the other drawings produced for the campus. Despite the differences in language, these layouts, like others, contain many subtly drawn details about the door. Despite the language differences, these layouts, include many subtly drawn details like other drawings. It is important in this study, which considers the gate as an object representing the whole, to try to reveal what architects dreamed. The new gate is located further behind Eskişehir road than the existing gate. The gate is consisting of two structures, a consultation, a right, and a left parapet, two plastics placed opposite each other, a median with lighting elements on it, and a metal pillar. The materials are described in detail in the drawings.

black Diyarbakır basalt in 20/40/50 dimensions was chosen for the parquet stone floors and pavement. The pattern on these floor coverings has been drawn expansively once again. On both sides of the road, sitting benches and skylights are embedded in the stone walls. When the details are studied in depth, it becomes clear that the gate is a reference to Anatolia, its civilizations, and architecture. The materials, design geometry, and additional elements all reveal this.

The "*şahniş*," a traditional type of bay window found in Turkish homes, is depicted in the gate as a section protruding from the left sidewalk wall. METU logo and a Hittite/ Phrygian head were designed for the metal pipe designed for the median. The gates were important threshold points for the Hittites and Phrygians, and their symbolic meanings were reinforced with important animal statues such as lions. This pole also references it.

The two eave plastics on the road's right and left sides to resemble an exploded passage tunnel section. The *top katalbe* and maple groups were considered for the gate's landscape. Examining the gate drawings reveals that, while the entire campus is structurally and materially united, this design does not represent the entire campus as architecturally precise. Instead of being a component of the whole, the gate has evolved into a new sculpture-like representation object in its own right, with traces from the campus.

CHAPTER 5

CONCLUSION

The main motivation for this thesis stems from the unique details of the METU campus. This study arose from the Campus Utopias Project, which is a continuation of the METU-KIM conservation project, supported by the Getty Foundation, and aims to conserve by documenting and raising international awareness. The research investigated the original intentions of the architects in the design of the campus to help manage future conservation policies and developments. Through its subtle details, the study aims to encompass many perspectives and issues capable of informing, representing, archiving, and rediscovering the values of the METU Campus. The works created for this project will also be included in the international exhibition that will take place as part of the Campus Utopias project.

In this study, detail is defined as more than mere a joint or the smallest part of a whole. Referring to the definitions developed by Colin Rowe and Kenneth Frampton in their critical histories, detail, gained a new meaning with modernism. Rowe's "The idea of speaking detail" and Frampton's perspective on "detail as the didactic craft of the architect" served as a guideline for this study's interpretation of detail in modern architecture. Detail has been deemed the minimal unit of signification in architecture also by many other prominent figures in the field of architectural theory. It is a narrative element and a representational object that articulates the larger whole. In light of these definitions, it is made clear that detail gives information about the architects' intentions. They become the extension of larger design decisions. As microcosms of the larger unity, details tell the story of their making, placing, and dimensioning.

The METU Campus becomes a recognizable case study that reveals the representational role of architectural detail and its relationship to the whole. The

campus is a ground of narrative and fertile details to be studied and discovered further, with individual levels of meaning contained in them, both physical and intellectual. In this context, the details of the METU campus provide an example of how a well-constructed relationship of details represents a successful meaning with the whole where nature, the built environment, and users are all intertwined. The research extended the understanding of the details of the campus, revealing the structural and material clues regarding the architects' intentions for the campus's first impression by analyzing its design while focusing on how details function as representational architectural elements.

The period and conditions under which the METU emerged as a utopia were briefly discussed. The points at which these situations had a significant impact on the architects and campus design were mentioned. The METU project, which aims to establish a new society under the influence of third-hand modernism, is the most effective physical and intellectual urban-scale project in Turkey. All of these turning points, as well as the architects' intentions, are represented in the campus's details.

With reference to Robin Evans, it was accepted that the drawings were the main products of the architects, and the design research was conducted on the drawings produced by Altuğ and Behruz Çinici for the campus. *In situ* research was carried out to understand the current situation and prevent the possibility of meaning loss while transferring from the drawing to the building.

Since its establishment, the METU campus has had a defined and autonomous land as a prominent modern architectural artifact. It interacted with the city as a gated campus through its monumental entrance gate, A1. This complex structure takes place in the urban memory with its symbolic meaning as well as its architectural image and it can be evaluated as an object of representation. As a corollary, Gate A1 is defined as an interface between the METU campus and the city. Regarding Alberti, Gate A1 is considered as a detail within the campus which is a whole. This design research investigated the relationship between the METU campus and Gate A1, through details in order to reveal the above-mentioned meaning of architectural

detail. The research revealed that the traces and continuation of the whole can be perceived in the details of the gate. The campus embodies considerably fertile and narrative details. In this study, it is attempted to summarize the main details repeated on campus that gain more meaning with these various usages. The traces of the whole are revealed in the gate itself and the parts of it through readings made over the gate's details. The research will not be able to reveal all of these details. It can be considered as a starting point for a wider and more comprehensive one. To sum up, the main contribution of this study is an archive of the narrative and fertile details of the METU campus on various scales. The research will not be able to reveal all of these details. It can be considered as a starting point for a wider and more comprehensive one. To sum up, the main contribution of this study is an archive of the narrative and fertile details of the METU campus on various scales.

This design research reveals, as explained subtly in the fourth chapter, that the campus is a whole formed by the details that continue, repeat, represent, and communicate with one another. These details are repeated in different elements at various scales, reinforcing their meaning with each reuse. This strengthens the detail's representational power. This study, which was conducted on METU's modern campus, can be described as a reading on architectural detail as a representational element in modernism.

REFERENCES

Anderson, Stanford. “Modern Architecture and Industry: Peter Behrens, the AGE, and Industrial Design.” *Opposition* 21, no. Summer 1980 (1980): 79–97.

Batur, Afife. “To Be Modern: Search for a Republican Architecture.” In *Modern Turkish Architecture*, edited by Renata Holod, Ahmet Evin, and Süha Özkan, 69–96. Ankara: Chamber of Architects of Turkey, 2005.

Bozdoğan, Sibel. *Modernism and Nation Building: Turkish Architectural Culture in the Early Republic (Studies in Modernity and National Identity)*. Publisher University of Washington Press, 2002.

Edward, R.Ford. *The Details of Modern Architecture, Volume 1*. The MIT Press, 1990.

———. *The Details of Modern Architecture, Volume 2*. MIT Press, 1996.

Eldem, Sedat Hakkı. *Türk Mimari Eserleri*. Istanbul: Yapı Kredi Yayınları, 1974.

Evans, Robin. “Architectural Projection.” In *Architecture and Its Image: Four Centuries of Architectural Representation: Works from the Collection of the Canadian Centre for Architecture*, 19–35. Cambridge: The MIT Press, 1989.

———.“Translations from Drawing to Building and Other Essays,” in *Translations from Drawing to Building and Other Essays* (Cambridge: The MIT Press, 1997), 153–93

Ford, Edward. “The Grand Work of Fiction: The Detail as Narrative.” *Architectural Design* 84, no. 4 (July 2014): 26–35. https://doi.org/10.1002/ad.1778.

Forty, Adrian. *Words and Buildings: A Vocabulary of Modern Architecture*. New York: Thames and Hudson, 2004.

Frampton, Kenneth. *A Critical History Modern Architecture*. Fourth. London:

Thames and Hudson, 2018.

———. *Modern Architecture A Critical History*. Fourth. London: Thames and Hudson, 1980.

———. *Studies in Tectonic Culture The Poetics of Construction in Nineteenth and Twentieth Century Architecture*. Edited by John Cava. MIT Press, 1995.

Frankfort, Henri. "The Origin of Monumental Architecture in Egypt." *He American Journal of Semitic Languages and Literatures* 58, no. 4 (1941): 329–58.

Frascari, Marco. "The Tell-the-Tale Detail." In *Semiotics 1981*. Springer, Boston, MA, 1981. https://doi.org/https://doi.org/10.1007/978-1-4615-9328-7_32.

———. "The Tell-the-Tale Detail." In *Theorizing a New Agenda for Architecture: An Anthology of ArchitecturalTheory*, edited by Kate Nesbitt, 2nd ed., 500–514. New York: Princeton Architectural Press, 1996.

Goldhagen, Sarah. "Something to Talk about: Modernism, Discourse, Style." *Journal of the Society of Architectural Historians*, no. 64 (2005): 144–67. https://doi.org/10.2307/25068142.

Gombrich, Ernst. *Art and Illusion, A. W. Mellon Lectures*. New York: Bollinger, 1960.

Gürel, Meltem, ed. *Mid-Century Modernism in Turkey Architecture Across Cultures in the 1950s and 1960s*. Routledge, 2017.

Harbeson, John Frederick. *He Study of Architectural Design: With Special Reference to the Program of the Beaux-Arts Institute of Design*. New York: The Pencil Points Press Inc., 1926.

Haubold, Johannes. *Greece and Mesopotamia*. Cambridge University Press, 2013. https://doi.org/10.1017/CBO9780511863240.

Herrmann, Wolfgang. *Gottfried Semper: In Search of Architecture*. Cambridge: MIT Press, 1984.

Hitchkok, H R, and Philip Johnson. *Modern Architecture : International Exhibition, New York, Feb. 10 to March 23, 1932, Museum of Modern Art*. New York: The Museum of Modern Art, 1932.

Karasozen, Rana. "Early Period of Modern Architecture in Turkey – A Case Study of Eskisehir." *IOP Conference Series: Materials Science and Engineering* 245 (October 2017): 052045. https://doi.org/10.1088/1757-899X/245/5/052045.

Kim, Ran Soo. "A Study on the Definition of the Term 'Tectonics' in Architecture." *ARCHITECTURAL RESEARCH* 8, no. December (2006): 17–26.

Kurdaş, Kemal. *ODTÜ Yıllarım "Bir Hizmetin Hikayesi."* ODTÜ Geliştirme Vakfı Yayıncılık, 2002.

"Lecture XI." In *Sir John Soane: The Royal Academy Lectures*, 239–59. Cambridge University Press, 2000. https://doi.org/10.1017/9780511613135.013.

Lorenzon, Marta. "FROM ARCHITECTURAL ANALYSIS TO ARCHITECTURAL THEORY City Gates as Public Spaces in Syro-Anatolian Urban Centers." *Journal of Eastern Mediterranean Archaeology and Heritage Studies* 9, no. 3 (2021): 225–46. https://doi.org/https://doi.org/10.5325/jeasmedarcherstu.9.3.0225.

Lu, Dufang, ed. *Third World Modernism Architecture, Development an Identity*. Routledge, 2011.

Muller, Lars. *Peter Zumthor:Thinking Architecture*. First. Baden: Lars Muller Publishers, 1998.

Ratté, Felicity. "NoArchitectural Invitations: Images of City Gates in Medieval Italian Painting." *Gesta* 38, no. 2 (1999): 142–53. https://www.jstor.org/stable/767186.

Sargın Savaş, Ayşen, and Arif Güven Sargın. "A University Is a Society: An

Environmental History of the METU Campus." *The Journal of Architecture*, no. 21 (2016): 602–29.

Savaş Sargın, Ayşen. *"A University Is a Society", ODTÜ Projeler 1 Yarışma Projeleri 2007-2008, Exhibition Catalogue*. Edited by Ayşen Savaş Sargın, 2008.

———. "We Have Learned Architecture from/at Behruz Çinici's Faculty of Architecture Building." *Mimar.Ist* 42, no. Winter (2021): 40–43.

Savaş, Ayşen. "METU Campus." *Brownbook Magazine* 67 (2018): 71–85.

Savaş, Ayşen, and Et Al. "The Conservation Plan for METU," n.d. http://www.getty.edu/foundation/initiatives/current/keeping_it_modern/report_library/metu.html.

Savaş, Ayşen, İpek Gürsel Dino, Sezin Sarıca, Bengisu Derebaşı, Fatma Serra İnan, and Şahin Akın. "Research and Conservation Planning for The METU Faculty of Architecture Building Complex by Altuğ-Behruz Çinici Ankara, Turkey." Ankara, 2020.

Sözen, Metin, and Mete Tapan. *50 Yılın Türk Mimarisi*. Istanbul: Türkiye İş Bankası Kültür Yayınları, 1973.

Viollet-le-Duc, Eugéne Emmanuel. *Discourses on Architecture*. Edited by Henry Van Brunt. Boston: James R. Osgood and Company, 1875.