

ABSTRACT AND SPATIAL PROJECTIONS OF CRITICISM:
ANALYSIS OF SIHHIYE ANKARA AS TOLERANCE SPACE

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



BY
KUTAY COŞKUNER

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

FEBRUARY 2022

Approval of the thesis:

**ABSTRACT AND SPATIAL PROJECTIONS OF CRITICISM: ANALYSIS
OF SIHHIYE ANKARA AS TOLERANCE SPACE**

submitted by **KUTAY COŞKUNER** in partial fulfillment of the requirements for
the degree of **Master of Science in Architecture, Middle East Technical
University** by,

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

Prof. Dr. Fatma Candaş Bilse
Head of the Department, **Architecture**

Prof. Dr. İnci Basa
Supervisor, **Architecture, METU**

Examining Committee Members:

Prof. Dr. Güven Arif Sargın
Architecture, METU

Prof. Dr. İnci Basa
Architecture, METU

Assist. Prof. Dr. Zeki Kamil Ülkenli
City and Regional Planning, TED University

Date: 04.02.2022



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 : Kutay Coşkuner

Signature :

ABSTRACT

ABSTRACT AND SPATIAL PROJECTIONS OF CRITICISM: ANALYSIS OF SIHHIYE ANKARA AS A TOLERANCE SPACE

Coşkuner, Kutay
Master of Architecture, Architecture
Supervisor : Prof. Dr. İnci Basa

February 2022, 180 pages

Altering the environment has always been carried out to create a new reality that is in line with the needs of the living entities. In this context, there is a problematic situation in the contemporary city where the needs and expectations of the society not only change over time but also conflicts with the priorities of some authorized and administrative groups. Accordingly, contemporary cities are often inadequate to offer solutions to current complications, they even generate further problems. This study attempts to identify the unfitting state of the city on both abstract and spatial dimensions. By using the concepts of organization and tolerance as a twofold point of departure, it is claimed that what is lacking in the contemporary city is a socio-politically porous interface that is essential to manage the complexity of a network of organizations without reducing dynamic entanglements. In spatial terms, this concept refers to a notion of place that is the anonymous public realm capable to manifest the features of progression and justice through engagement. In this study, those qualities attempted to encapsulate under the name of tolerance space. Sıhhiye District of Ankara is examined as a case study of tolerance space as considered to be representative of given qualities.

Keywords: Organization, Tolerance, Open Public Spaces, City, Modernity.



ÖZ

ELEŞTİRİNİN SOYUT VE MEKÂNSAL İZDÜŞÜMLERİ: BİR TOLERANS ALANI OLARAK SİHHİYE ANKARA ANALİZİ

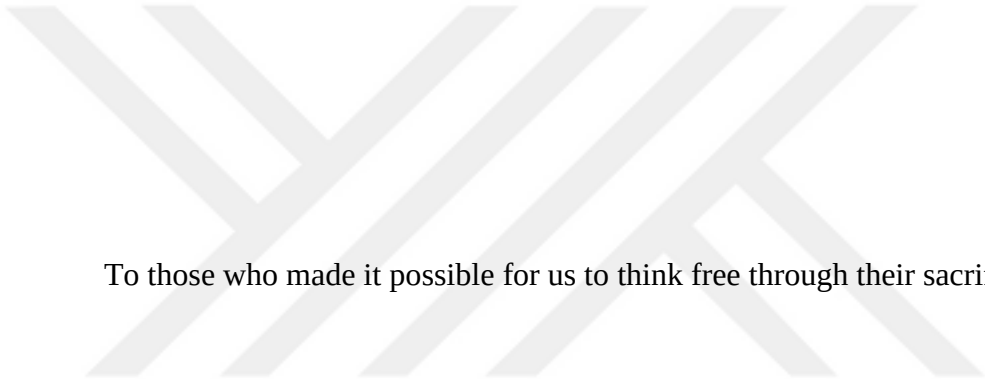
Coşkuner, Kutay
Yüksek Lisans, Mimarlık
Tez Yöneticisi: Prof. Dr. İnci Basa

Şubat 2022, 180 sayfa

Doğal çevreyi değiştirmek her zaman canlıların ihtiyaçları doğrultusunda yeni bir gerçeklik yaratmak için yapılmıştır. Bu bağlamda, toplumun ihtiyaç ve beklentilerinin zaman içinde değişmekle kalmayıp, aynı zamanda bazı yetkili, idari grupların öncelikleriyle çeliştiği çağdaş kentte sorunlu bir durum söz konusudur. Çağdaş şehirlerin çoğu zaman mevcut karmaşıklığa çözüm sunmakta yetersiz kaldığı, üstelik daha fazla soruna neden olduğu görülmektedir. Bu çalışma, kentin çelişkili durumunu hem soyut hem de mekansal düzeyde belirlemeye çalışmaktadır. Örgütlenme ve hoşgörü kavramlarını iki yönlü bir çıkış noktası olarak kullanarak, çağdaş kentte eksik olanın değişken ve dinamiği azaltmadan bir örgütler ağının karmaşıklığını çözümlmek için gerekli sosyo-politik açıdan geçirgen bir arayüz olduğu öne sürülmüştür. Mekânsal olarak, bu kavram, katılım ile ilerleme ve adalet özelliklerini ortaya koyabilen anonim kamusal alan olan bir yer kavramını ifade eder. Belirtilen nitelikler tolerans alanı adı altında özetlenmeye çalışılmıştır. Ankara'nın Sıhhiye Semti, sunduğu mekânsal nitelikler ile bir tolerans alanı olarak incelenmektedir.

Anahtar Kelimeler: Organizasyon, Tolerans, Açık Toplum Mekanları, Şehir, Modernite.





To those who made it possible for us to think free through their sacrifices

ACKNOWLEDGMENTS

This work is a result of an analysis of nature and artificiality as well as the greatest systematic study that I had in terms of both time and effort. During the process, I have encountered many personal and social problems. Without the support and tolerance of my thesis supervisor Prof. Dr. Inci Basa, it would not be possible to complete this study. Therefore, I owe my deepest gratitude to her. My thesis supervisor not only did share her work and concepts with me with great generosity but also allowed a space of freedom and healthy communication opportunity that grounded for me to work individually. Without her guidance, I could not have imagined the possibility of autonomous and unbounded architecture on a literary medium that I am proudly presenting now. I am honored to be her student.

I would like to thank my jury members, Prof. Dr. Güven Arif Sargin and Assist. Prof. Dr. Zeki Kamil Ülkenli, for their effort and offering a new dimension to the concept of criticism through their valuable contributions that allowed me to fold my mind back through new perspectives.

Moreover, I must thank to Prof. Dr. Haluk Pamir, Prof. Dr. Cana Bilsel, Prof. Dr. Ayşen Savaş, Prof. Dr. Altan Koçyiğit ve Assist. Prof. Dr. Esin Kömez Dağlıoğlu for allow us to live the University culture as a rare opportunity as an atmosphere and in addition to education, guided us to become enlightened individuals.

I would like to propose my special thanks to my friends Onur Emre Tüzün and Tunç Dabak who have the courage to criticize their friends. I had many times had an opportunity to correct and progress myself through our long discussions they have not only contributed to my work also to me to sculpt myself as a better human

being. Also, I would like to thank the OpenMETU working group who allowed me to be part of a prestigious project and wonderful working environment which also indirectly contributed to this work.

Finally, I would like to express my greatest gratitude to my beloved family, who I see as my immense luck, who taught me how to live with integrity and dignity; and to my brother who helped to concretize and understand the content of the work through describing and correcting my grammatical mistakes countless times.

I have also learned and improved a lot while conducting this study. Although I would rather propose this study in a more adaptive medium, I am glad that I am being able to present it. If in some way this work could make a small contribution to the creation of a more just and free society, or to science and art, I would be honored to have fulfilled, at least a little, my responsibility to the people whose names I have mentioned, and those who worked and sacrificed for better future to living beings, whose names are numerous to count.

TABLE OF CONTENTS

ABSTRACT	v
ÖZ	vii
ACKNOWLEDGMENTS	x
TABLE OF CONTENTS	x
LIST OF FIGURES	xiv
1 INTRODUCTION	1
1.1 Conceptualization of the Problematic	1
1.2 Methodology and Literature	5
1.3 Structure of the Thesis	12
2 ORGANIZATION, TOLERANCE, AND MODERNITY	15
2.1 Concepts: Organization and Tolerance	15
2.1.1 Organization	15
2.1.2 The Tolerance Between Dichotomous Extremities	28
2.1.3 Tolerance Space as a Framework of Criticism	36
2.2 Modernity as Critical Mechanism	37
2.2.1 Paradigm of Modernity	39
2.2.2 Enigma of Modernity	54
3 PROJECTIONS OF TOLERANCE SPACE	71
3.1 Open Society	71
3.2 Open City	76
3.3 Dimensions of Tolerance Space	85
3.3.1 Justice	85

3.3.2	Freedom.....	88
3.3.3	Progression	92
3.4	Tolerance Space through Examples.....	96
3.4.1	Tolerance Space in Binary Representation of Data	97
3.4.2	Tolerance Space in Personal Space	97
3.4.3	Tolerance Space as Time.....	100
4	SIHHIYE DISTRICT OF ANKARA	103
4.1	Brief Information About Sıhhiye	103
4.2	Context of Sıhhiye	109
4.2.1	Sıhhiye as Tolerance Space.....	121
4.2.2	Accessibility Openness.....	121
4.2.3	Porosity.....	123
4.2.4	Anonymity.....	127
4.2.5	Engagement.....	129
4.2.6	Demand	129
4.2.7	Multiplicity.....	132
4.2.8	Flexibility and Adaptability	138
5	CONCLUSION.....	143
	REFERENCES	151
A.	On the Concepts and Methods of Modernity	173
B.	Examples of the Enigma of Modernity	178
C.	Sıhhiye as Place of Demand.....	179
D.	CSO Concert Hall	180

LIST OF FIGURES

FIGURES

Figure 1. Graphical Depiction: Dichotomous extremities, binary discretization, and continuous gradience.	30
Figure 2. Graphical Depiction: Superimposition of pattern-wise similarities of paradigm shifts on harmonic movement.	41
Figure 3. Depiction: Layers of modernity.	49
Figure 4. Ugolino di Nerio, Depiction of The Last Supper. 1324.	51
Figure 5. Leonardo Da Vinci, Last Supper. 1520.	51
Figure 6. Georges Braque, Bottle and Fishes. 1912.	51
Figure 7. Jackson Pollock, One: Number 31. 1950.	51
Figure 8. Graphical Depiction: Mechanism of authoritarian-leap.	57
Figure 9. Maison Dom-Ino. 1915.	59
Figure 10. Plan Voisin. 1925.	59
Figure 11. Zaha Hadid Architects proposal for Kartal-İstanbul. 2006.	66
Figure 12. Aerial drone shot of İstanbul-Kartal. 2019.	66
Figure 13. Graphical Depiction: Deprogression and progression.	68
Figure 14. Graphical Depiction: Categories of human organizations.	73
Figure 15. The City within the City—Berlin as a Green Archipelago, 1977.	81
Figure 16. Rem Koolhaas, The City of the Captive Globe, 1972.	81
Figure 17. Graphical Depiction: Distribution extremities.	83
Figure 18. Graphical Depiction: Power as an interface between organization and freedom.	89
Figure 19. Verbal Depiction: Presumed outcome of organizational effort.	92
Figure 20. Categorization Tree: Merits of Open City.	96
Figure 21. Categorization of Housing Discourses.	99
Figure 22. Broom Bridge Plate. n.d.	101
Figure 23. Location of Ankara in the Republic of Turkey.	104
Figure 24. Comparison of inner- and municipal perimeters of Ankara.	104

Figure 25. Lörcher Plan, 1924.	104
Figure 26. Jansen Plan, 1932.	104
Figure 27. Sıhhiye in Ankara.	105
Figure 28. Some focal points in Sıhhiye.	107
Figure 29. Refik Saydam Hygiene Institute. n.d.	112
Figure 30. Animal signs are chosen by various countries for representation purposes. Respectively, Royal Coat of Arms of the United Kingdom, Bundesadler (Coat of Arms of Germany), Great Seal of United States.	114
Figure 31. Depictions of France as Marianne. Respectively, Liberty Leading the People , Marianne Logo.	115
Figure 32. Depictions of Turkey as a black-haired confident woman in early posters of Turkey.	116
Figure 33. Presidential Symphony Orchestra in CSO Concert Hall (Old). n.d. ...	120
Figure 34. Hittite Sun Course Monument, Nusret Suman, 1978.	125
Figure 35. Hands, Metin Yurdanur, 1981.	125
Figure 36. Sculpture of Ahmet Adnan Saygun. 2021.	126
Figure 37. The Nymphs, 1925.	127
Figure 38. Hygieia, Wilhelm Frass, n.d.	127
Figure 39. Frames of public protests in Sıhhiye.	131
Figure 40. Ankara Painting and Sculpting Museum. 2021.	135
Figure 41. Ankara University Faculty of Language History and Geography. 2021.	136
Figure 42. Cermodern. n.d.	140
Figure 43. Cermodern before and after. n.d.	141
Figure 44. Cermodern Interior. n.d.	141
Figure 45. Bridges of Königsberg.	175
Figure 46. Euler's graph.	175
Figure 47. Subway Mappings are typical usage of graph theory.	176
Figure 48. Camera Obscura.	177
Figure 49. Michaelangelo, David. 1501-4.	178

Figure 50. Osmar Schindler, David and Goliath. 1888.	178
Figure 51. CSO Concert Hall (Old). n.d.....	180
Figure 52. CSO Concert Hall (New) By Uygur Architects. 2021.....	180
Figure 53. CSO Concert Hall (New) By Uygur Architects. 2021.....	180



CHAPTER 1

INTRODUCTION

1.1 Conceptualization of the Problematic

Humans, as well as other living beings, alter their environment to be able to live through a more convenient and meaningful presence and to create something better than what already exists. As a collaborative production of civilization, the city ideally appears as a masterpiece of such alteration. Hypothetically, the city has been assumed to be capable to propose a different experience that could negate some cruelest realities of existence. However, inescapably there occurred an unfitting condition between the aspiration and the realization of the city, especially when it started to cope with socio-political, cultural, and economic complexities that existed beyond the fundamental realities of nature. This study attempts to inquire into the discrepant state of contemporary cities regarding both abstract and tangible spatialities. Urbanization is the term developed by Ildefons Cerdà as a rational paradigm¹ that proposed solutions to the problems that feudal cities could not cope with. The proposal of Cerda, *the grid*, a simple but strong system of uniformity that could unite and accommodate integrable architectural archetypes, was thought to be capable of bearing different functions. The *paradigm of urbanization* provided a standard for hygiene, access to electricity, clean drinking water, ease of distribution, uniform deployment on social services, and infrastructure. Urbanization also became a powerful instrument for the

¹ Ildefons Cerdà, General Theory of Urbanization, 1837, 2018.

flourishment of actions that were taken into account by modernism through its rational solutions. In the contemporary world, urbanization is even more powerful by automation enhancements of information theory as visioned by Claude Shannon² and following scholars. The notion of urbanization has transformed in the 20th century through technologies such as the internet, big data, artificial intelligence, machine learning; and today, it constantly develops via industry 4.0 advancements. Although humans have made great progress in infrastructure systems, urbanization still can not provide efficient answers to many problems of the contemporary city, even with the assistance of technology. As a tangible parameter today many of the cities are suffering from crowding, crime, housing problems, homelessness, immigration, traffic, transportation, air pollution, class and ethnicity-based segregation, asymmetry in social and educational opportunities as well as ecological problems.³ Richard Sennett describes the cities that everyone would want to live in as follows:

The cities everyone wants to live in would be clean and safe, possess efficient public services, support a dynamic economy, provide cultural stimulation, and help heal society's divisions of race, class, and ethnicity. These are not the cities we live in. This is so in part because the city is not its own master; cities can fail on all these counts due to national government policy or to social ills and economic forces beyond local control. Still, something has gone wrong, radically wrong, in our conception of what a city itself should be.⁴

² Claude Shannon, *A Symbolic Analysis of Relay and Switching Circuits*, 1937.

³ Steven Barkan, *Social Problems: Continuity and Change*, 2012.

⁴ Richard Sennett, *The Public Realm*, 2014: 1.

Richard Sennett argues that contemporary cities are gradually losing their capacities, adaptability, and reasoning by over-determined programs of a closed system. In parallel to what Sennett argues, the current study aims to illustrate the soundness of this argument and justify the significance of the question of why it is essential to unfold this condition. The study also attempts to describe the abstract and spatial projections that emerge as needs as a result of interaction and applied solutions and their problematics by decoding the complex structure that is produced by humankind. By all means, it would not be correct to evaluate the problematic of the city merely through actors that one would simply preconceive such as city planners, architects and engineers. In line with Lefebvre's spatial understanding,⁵ the city is hypothesized as the product of a complex organization; therefore, it is necessary to include all the actors involved in the problem, which means everyone who is creating, demanding, and/or serving in the society; thus, affected by the system.

Congruently, Pier Vittorio Aureli is providing a counter-argument against the policy of urbanization and to the system using it as an instrument.⁶ Aureli criticizes infinity, the expansionist policy of urbanization primarily on the problematics of limit and autonomy. He theorizes the problem of the city upon the difference and tension between the concepts of private and public and inquiries the city by analyzing the epistemological understandings between the Greek- and Roman cities. Aureli examples a place once has been existed in the Greek City; the Agora as a tool of a relatively porous spatial interface where artificial complexities dissolved and organization became possible. And, continues with the Roman example as he points out how Romans blended *public* and *private* both discursively and spatially, which eventually resulted in the dispersion of described space. This

⁵ Henri Lefebvre, *The Production of Space*, 1974, 1991.

⁶ Pier Vittorio Aureli, *The Possibility of an Absolute Architecture*, 2011: 2-46.

condition is regarded to be recursive replication of problematic infinity. Thereby, the hypothesis of this study formed as follows: the contemporary cities are inadequate in providing solutions related to nature or human life and the values that make the complex organization possible. Contrarily, the city in the 21st century identically transforms and expands for the perpetuity of a system that has no rational relationship with the alteration of the natural environment. Each of the encountered problems may require different perspectives and expertise. However, it is clear that in its current state the city lacks the permeable communication mechanisms that could produce solutions in the framework of sustainability that would not prioritize any private group to the benefits of the public via the totality of the organization.

This study forms its analysis based on organization and tolerance as a twofold point of departure as pillars in the evolutionary process in the establishment of human civilization. It suggests that the system that creates and manipulates the current state of the city contradicts the parameters that would make a complex organization possible. It underscores the questions of why and for which reasons does the city exist and what the city should be considering the points of reasoning that made civilization possible; provides a comparative analysis of existent conditions by suggesting contextual links and differences between the paradigm of modernity and modernism. Describing modernity as a holistic project, the study emphasizes the fundamental problems that modernity is coping with. Those are named respectively, the problem(s) of- *absolute authority*, *autonomy*, and *repetition*. Eventually, even though this study does not aim to provide an insight into the current problems of the city or the problems that may exist in the future, it aims to describe a spatial interface that attempts to eliminate the semantic inconsistency by a perspective, through revealing contradictions between the reason and the realization of city encapsulated under the name *tolerance space*. Eventually, it is suggested that those inquiries reveal a social and abstract set of qualities to prevent described contradictions. And the content of the theoretical outcome of the study

attempted to be crystallized upon a case study Sıhhiye, Ankara that thought to be an example of tolerance space. The reason for preference in the case study is not only dependent on spatial qualities that will be articulated as tolerance space, but also on the parallelity of Ankara with the paradigm of modernity. Ankara is one of the few established 'statement' capitals after the Industrial Revolution.⁷

It is suggested, in Ankara's non-coincidental array of spaces that are both historically and spatially salient, Sıhhiye is manifested as a communication and interface space that connects the old and the new, calling for progress without segregation or dictation. The spatial qualities of Sıhhiye is offering the possibility of an open society while protecting its individuals from the oppression of the dominant. The designation of these qualities and their spatial practice will be articulated through the study. These two-sided description zones, which are thought to have been realized on Sıhhiye, are the main reason why it is considered as a case study that is a rare space in parallel with the theoretical core of this study.

1.2 Methodology and Literature

To inquire about the city and organization, the present study proposes a set of questions in each chapter and attempts to construct critical reasoning by inspecting, events and literature on articulated topics. The premising questions of this study are, *what is the city? why does the city exist? And whom is the city for?* However, proposing an all-including and adaptive definition is not an easy task as it seems in the preliminary sight. “Definitions are powerful when they are flexible to perceive the ever-shifting boundaries and relationships of the defined”, as İnci Basa states. *“They are valuable when they perceive their defined objects, not as entities frozen*

⁷ Baykan Günay, Ankara Spatial History, 2012: 2.

in time, but rather as an ongoing process"⁸. It is then possible to find a plethora of definitions for the city; all of them might be true and inadequate at the same time. Equivalently, conventional definitions rendered through current episteme might hinder further articulations, especially when the contextual relations and differences between timely understandings are ignored. As a result, accepting any dictionary definition uncritically is considered to be insufficient to conduct the inquiry of this research. Instead of binding a grasp of understanding upon a certain definition, it is deemed more appropriate to develop a perspective, through devising descriptions and axioms would be possible for the structuring of the contents of the work. As will be discussed further, this study constructs its structure upon these axioms:

- The city is an altered environment.
- The city is for society.
- Society is an organization.

The city as *an altered natural environment* is considered to serve *society*. From the scope of the subject-object (society-city) relationship. The notion of the organization is articulated to understand the needs and reasoning of the society.

On the inquiry of organization, the adopted method is to inspect examples of organizations from preliminary to complex to devise a description. One of the reasons for the basic organizations appears as a necessity of survival. To understand this task the chosen literature is mainly clustered in the discipline of biology. From Pierre Belon's texts⁹ to the systematization of George Cuvier,¹⁰ a sub-discipline of evolutionary biology, comparative anatomy is concretizing

⁸ İnci Basa, *Linguistic Discourse in Architecture*, 2000: 29-30.

⁹ The Editors of *Encyclopaedia Britannica*, Pierre Belon, 1998.

¹⁰ Georges Cuvier, *The Animal Kingdom*, 1817.

similarities and differences of organs of living beings upon their vast range of mechanics that succeed on the act of survival. Furthermore, comparative anatomy provides logical statements for the living beings' distinctive tools of survival and determines when they begin to differentiate in time through observation. However, as humankind overcome nature, the more complex examples of the organization such as the society, consideration of organization as a mere act of survival seemed to be inadequate. Although the survival action has been accomplished, some concepts are needed to overcome the emerging complexities of the organization in terms of *structural sustainability*. İnci Basa suggests "... *there is no discipline that can be isolated from the interdisciplinary interactions. No single discipline can produce and manage its objects without reference to other fields, or without being informed and affected by them*".¹¹ As an instance, the outputs of the discipline of biology were used as a tool to inquire organization model's inner power relations and to propose new models for the organization. A well-known example of this condition is the inquiry of the religious authorities through Charles Darwin and Alfred Russel Wallace's *theory of evolution*. Furthermore, the theory of evolution is used to suggest a model for social systems. The contemporary conceptualizations of neoliberalism such as *free market* and *encouragement of competition* could be interpreted as semantically corresponding reflections of the iconic statement "*survival of the fittest*".¹² In 1902, Peter Kropotkin proposed a new factor in evolution: the *theory of mutual aid*, another tool produced in the discipline of biology to inquire about artificial systems of the human organization.¹³ Kropotkin provided how *cooperation among others* could be another aspect of nature. Given sources used to analyze, and construct a base for the organization and to devise models for the society.

¹¹ İnci Basa, 2000: 7.

¹² Allen Ruf, *Neoliberalism, the New Social Darwinism, and New Orleans*, 2005.

¹³ Peter Kropotkin, *Mutual Aid: A Factor of Evolution*, 1902.

In the following section, it is attempted to propose reasoning for the organization. In 1944, John von Neumann and Oskar Morgenstern's game theory proposed a model of organizational breakpoints.¹⁴ The game theory proposes a statistical justification for decision-making in two types of categories as competitive and cooperative games. According to Neumann and Morgenstern's model, basic forms of organization might be articulated under cooperative structures. *Why do living entities cooperate or organize?* Regardless of the model of organization, the state of cooperation binds the actions of participants with a set of rules. Hence, an organization might be understood as *a sacrifice from apriori benefits* of an individual to reach a greater goal. Consequently, a tension between sacrifice and the goal reveals as the parameter of *tolerance* that seals limits, in other words, the breakpoints of the state of cooperativeness. This study suggests, tolerance appears as an impure but dispensable parameter for the organization; and, the concept has been discussed by various scholars and descriptions. Karl Popper grasped the paradoxical condition of tolerance and revealed the contradictory projections on social systems as open and closed societies.¹⁵ Eventually, the idea of tolerance space is articulated upon a variety of dimensions each of which has its source. In the social dimension, Karl Popper's dialect between open and closed society; in its formal/object scope, Pier Vittorio Aureli's¹⁶ *absolute architecture*; and, in more mathematical (or abstract) dimension, Neumann and Morgenstern's game theory,¹⁷ constituted the backbone of this study. Thereby, in proposing a theoretical framework, contextual analysis, articulation and thought experiment methods are used to vitalize the theoretical core of this study.

¹⁴ J. von Neumann and O. Morgenstern, *Theory of Games and Economic Behavior*, 1944.

¹⁵ Karl Raimund Popper, *The Open Society And Its Enemies Complete: Volumes I and II Fifth Edition (Revised)*, 1945, 2019.

¹⁶ Pier Vittorio Aureli, 2011.

¹⁷ J. von Neumann and O. Morgenstern, 1944.

Once humans overrode the predicaments of nature, they faced a new set of requirements, complexities, and relations that occurred as indispensable facts of societal establishments. However, each artificial system humans developed brings a set of advantages and disadvantages and builds its problematic condition. Thus, there appears a need for a critical mechanism that constantly inquires whether the artificial system produced by humans is functional or does it suggest a rationale for the state of cooperation. By the account of Jürgen Habermas, *the project of modernity*¹⁸ is suggested and articulated as a composition of such a mechanism. Therefore, in this study, modernity is regarded as an emancipatory project,¹⁹ an attempt to create alteration beyond the cruelties of existence. In another aspect, it is articulated as a critical mechanism to regulate artificial systems developed by humankind upon proposing a rationale for organization and tolerance. Actions taken by the name of modernism are deliberately segregated from the paradigm of modernity. Hopefully, the conceptualization of the problematic and proposed inspection of the mechanism through discourse analysis provide stimulating responses to the first research questions of why the city exists.

Next, the study inquires what are the reasons behind the inconsistencies between aspirations and realization of the city? An articulation here requires to identify the differences between the ideal and the existent. A comparative analysis is then found appropriate in different scales on the discursive level for this inquiry. Through suggesting an analysis and description for the two mastering concepts of this study, organization, and tolerance, it is also aimed to depict a critical mechanism to evaluate contradictions of the built environment. Thus, from the framework of Karl Popper, the difference between open and closed society is

¹⁸ Jürgen Habermas, *Modernity vs Postmodernity*, 1981.

¹⁹ The term used by Güven Arif Sargin in a lecture to describe the capacity of Architecture, 11 Feb 2020.

discussed to reveal the inconsistency between aspiration and realization of the city on a social dimension.²⁰ Correspondingly, the idea of Richard Sennett's open city is discussed in a formal dimension by the described distinction through comparison. It is aimed to reveal the hypothesis of the present study.

This study claims that what is lacking in the contemporary city is a socio-politically porous interface that is essential to manage the complexity of a network of organizations without reducing ever-changing and dynamic entanglements. In spatial terms, this description refers to a notion of place that addresses the anonymous public realm, which provides an opportunity for exchanging information, raising voice as well as encountering the other, manifesting the features of engagement, adaptability, and flexibility. The idea of the public realm is articulated by various dimensions and scholars respectively, Jürgen Habermas²¹, Henri Lefebvre²² and Richard Sennett.²³ Lately, İnci Basa argued the unobtrusive aspect of the public realm under the name of tolerance space.²⁴ It is attempted to discuss the revealed aspects of anonymous space of the public realm by Sennett and its private scale under the name of a superset, the tolerance space. The concept of tolerance space is favored over the public realm because it is considered to apply an abstract and personal dimension. Eventually, the conceptualization of the idea of tolerance space is rendered upon a case within this study to contextualize its theoretical framework and discussed arguments. The Sıhhiye District of Ankara is examined as a tolerance space as it is considered to be a representative of justified spatial qualities. Such an analysis requires the inspection of a set of contextual

²⁰ Karl Raimund Popper, 1945, 2019.

²¹ J. Habermas and S. Ben-Habib, *The Structural Transformation of the Public Sphere*, 1962.

²² Henri Lefebvre, 1974, 1991.

²³ Richard Sennett, *GSD Talks: Richard Sennett, "The Open City"* [Video File], 2017.

²⁴ İnci Basa, *Transformation From Representational Space to Tolerance Space: The Juxtaposition of Ideal and Real in the Urban Public Area*, 2018.

relationships, as the city of Ankara provides a significant example to articulate the theoretical part of this study including modernity, modernism, the idea of open society, and tolerance space which also constitutes one of the main reasons for Sıhhiye District to be chosen as a case study. The research is planned to be conducted by seeking answers to a set of questions; some of them might be revealed as follows:

- who are the users?
- what was the designated purpose?
- by which mindset is it designated?
- which spatial opportunities does Sıhhiye offer?
- how has it changed during the time and is there a political correlation on this change?
- in which aspects Sıhhiye is different from its designated purpose?

Starting from Ankara to scale down to Sıhhiye, the historical and interpretative works of Gönül Tankut²⁵, Sibel Bozdoğan²⁶, Ali Cengizkan²⁷ and Serpil Özalöğlü²⁸ constitute the main material of the case study. To trace the correlation between the discourse and space, along with the academic texts, macro form changes from archived master plan interventions of Ankara, news, blog entries, photographs, ephemera, existent architecture, monuments, and statues that constitute the identity of the Sıhhiye have been used to conduct this research.

²⁵ Gönül Tankut, Ankara'nın Başkent Olma Süreci, 1988.

²⁶ Sibel Bozdoğan, Modernism and Nation Building: Turkish Architectural Culture in the Early Republic, 2001.

²⁷ Ali Cengizkan, Türkiye için Modern ve Planlı bir Başkent Kurmak: Ankara 1920-1950, 2010.

²⁸ Serpil Özalöğlü, Sıhhiye Meydanı'ndan Sıhhiye Köprüsü'ne: Köprü'de Gündelik Hayat, 2011.

1.3 Structure of the Thesis

This thesis is structured under five main chapters. Chapters are ordered respectively as the introduction, analysis, synthesis, case study, and conclusion.

²⁹Briefly discussed in the previous section, each chapter uses different but related literature to articulate its object. The introduction chapter proposes a conceptualization of the problem, employed literature and methodology, and structure of the thesis. Succeding chapters are structured as follows:

Chapter 2. Analysis: By the consideration of the City as an altered environment, this chapter inquires the reasons for altering the existent environment by living beings. The second chapter theoretically discusses its object in a wider discursive context, and it suggests a rationale for the relationship between the concepts of organization and tolerance that would enable to ground the study's hypothesis. Moreover, it interprets the paradigm of modernity as a critical mechanism. Starting with the evolutionary process of survival this chapter renders the social structure of humanity as a constantly changing outcome of the process. In the following section of chapter two modernity as a critical mechanism, which regulates an artificial system developed by humans, is investigated. Within this aspect, actions taken by the name of modernism are deliberately segregated from the core idea of modernity. Thereafter, the differences and contradictories inquired upon three distinct concepts, modern, modernity and modernism.

²⁹ One of the questions in structuring the study was that the reciprocal relationship between the presented theoretical model and the case study resulted in a dilemma about which one should be prior. At this point, the study aimed to propose a critical model rather than a spatial analysis, although the analysis is part of the reasoning of the model. Thus, theory to the case study structure is adopted. Another reason if this design decision is for being able to apply the proposed model to different spaces i.e., model-view separation principle.

Chapter 3. Synthesis: In the third chapter, by using the depicted theoretical framework, the study proposes its hypothesis as deprivation of a mechanism that could produce solutions and manage the complexity of the organization. In spatial terms, tolerance space refers to a political space that is bearing a set of qualities concealed under the name of the anonymous public realm. The concept of tolerance space as a social and spatial construct will be discussed by correlative frameworks and differences of open and close societies, border and boundary. Qualities of tolerance space will be critically reviewed at social and spatial levels.

Chapter 4. Case Study: This chapter renders the qualities of tolerance space through a related exemplification. Sıhhiye District of Ankara is selected and examined as a case study. Examination of the case is conducted in two sections. The first section evaluates the discursive analysis scoping down from Ankara to Sıhhiye to render theoretical aspects of this study; modernity, open society, public realm will be discussed. Consequently, the second section scrutinizes the qualities of tolerance space upon tangible spatialities of the district of Sıhhiye through changes, usage, architectural objects artworks, and other visual mediums.

Chapter 5. Conclusion: In the last chapter, inferences and conclusions of the study are presented. This study attempts to create an insight over problems and contradictions about the way of understanding the city through analyzing the concepts of organization, tolerance, and modernity. And, it endeavors to justify its hypothesis by depicting an actual spatial deficiency caused by the given condition. It is hoped that this thesis would propose a contribution to the knowledge and practice on the production of the altered environment through an inquiry into the production of the built environment.

CHAPTER 2

ORGANIZATION, TOLERANCE, AND MODERNITY

2.1 Concepts: Organization and Tolerance

2.1.1 Organization

The method adopted to analyze the city is to examine the concepts that make the production of the city possible. In this study, the subject of the city is regarded as a society, and humans are the only living beings that we know through their capability to alter the natural environment in such complexity that would be named a city. Therefore, it is evaluated as valid to study the characteristics that make humans different from other living beings thus making it possible to create this complex built environment. Ted Chu³⁰ marks these distinctive features of humans as intelligence, higher consciousness, tool making, and usage, ability to form complex organization models, high-level communication, and abstract thinking. Another method might be revealing differences that distinguish the city from other types of settlements. The first thing that comes to mind when the thought of a discretized archetype of settlements such as the village, town, and the city might be the magnitude. However, magnitude is not enough by itself to distinguish the city from other settlements. In the city, unlike the town or village, people with different specialties, professions, backgrounds, cultures co-exist together. For each individual, people of the city are strangers; this also brings to an individual a certain level of anonymity. Living with strangers is not an obstacle to being part of

³⁰ Ted Chu, 2014: chapter 6.1 Human Uniqueness.

a unified organization. The city is the built environment that regulates and serves the organization with greater complexity. This condition was evaluated as the most distinctive feature of the city. In both methods, the common outcome of the city is the concept of organization. Hannah Arendt indicates the organization as a fundamental feature of the human condition as follows:

Things and men form the environment for each of man's activities, which would not be pointless without such location; yet this environment, the world into which we are born, would not exist without the human activity which produced it, as in the case of fabricated things; which takes care of it, as in the case of cultivated land; or which established it through the organization, as in the case of the body politic. No human life, not even the life of the hermit in nature's wilderness, is possible without a world that directly or indirectly testifies to the presence of other human beings.³¹

It is considered to be a valid point: the inquiry of the city begins with the structural nature of the episteme and understanding the prime concept of the city, *the organization*.

2.1.1.1 How Organization Emerged

The organization is a complex concept, especially including the artificial human structures; any cooperative interaction could be regarded as an organization. However, the most basic forms of the organization appear in nature as a mechanism for survival. And, also these basic forms of organizations provide the same causalities as why do organizations exist. Therefore, it is considered relevant

³¹ Hannah Arendt, *The Human Condition*, 1958: 22.

to examine the development of the organization, starting from the simple organization models in nature. The literature that will make it possible to question these models are usually clustered within the disciplines of biology, archaeology, and paleontology.

Comparative anatomy is known as an intermediate discipline between paleontology and biology. Through analytically examining the paleontological periods where the organs of living beings begin to differentiate, it could provide information regarding the common ancestors of species and the success of the survival mechanisms that species developed through evolution.³² From a simple example, we know that if a species has a claw, it is a carnivore; because the claw is an organ devised for hunting in the evolutionary process. Through observing similarities and differences between species in nature, Charles Darwin revealed the correlation between survival mechanisms and their accordance with the environment. And, through examining the competition of survival in nature, he suggests two mechanisms that determine which species succeed in surviving while the others are eliminated. *Mutation* and *natural selection* are still known as the mechanisms of evolution.³³ When the evolutionary development of humans is examined one can discern a correlation between skills and properties that made the creation of cities possible. From the perspective of comparative anatomy, humans were neither predators nor survivalists with speed, agility, or high levels of perception. Humans organized to increase their chances of survival, as seen in almost all mammal species.

³² The Editors of Encyclopaedia Britannica, 1998-2020: Comparative Anatomy.

³³ Charles Darwin, *On the Origin of Species by Means of Natural Selection, or the Preservation of Favoured Races in the Struggle for Life*, 1859, 1997.

Ali Demirsoy explains³⁴ the evolutionary development of humans as follows; from Hominoidea superfamily to the Hominidae family (households the human species, homo sapiens) a change started on hominids with mutation occurred on the spine which enabled them to orient body mass toward backward. The ability to stand up straight caused to spend more time on the ground rather than trees; as a result, legs became stronger while the upper body weakened. As weaker beings, hominids could not compete against their relatives in the forest therefore they migrate towards the savanna ecosystem. Spending time in the savanna is causing a chain reaction of adaptation events, firstly, as the hominids have begun to live completely on the ground, their legs become even stronger, this condition resulted in the capability to explore and know about a vast range of lands. Secondly, unlike in the forest, they were unprotected from the sun in the savanna as well as they had to travel long distances to be able to find food, their bodies reacted to this situation with hair loss in the body and developed a cooling mechanism known as sweat glands. This condition resulted in hominids having even greater mobility.

In the Savanna ecosystem, the rate of finding food is increasing, as the competition is lesser than the forest, and the range of action is expanded. However, plant-based nutrition is resulting in the atrophy of canine teeth. The hominids, whose only weapon against other predators is their teeth, realize that they can no longer defend themselves with it. On the other hand, hands were not a part of anatomical mobility. Additionally, hands that lose their muscle mass and hair, became suitable for abilities that require precision even though they lose their grip capacity and strength. At this point, they start to make simple level tools by using hard objects such as stone wood to mimic their teeth. Although tool usage is not unique to humans among living beings, through functional abstraction with imagination, hominids reciprocally developed their survival mechanism, the imaginary zone that

³⁴ Ali Demirsoy, 2005: 692-694.

produces the idea of making tools: their minds. As they noticed their tools are superior to their teeth, hominids begin to hunt animals that they could not compete with before. However, even with their tools, as new predators, hominids know their prey is much stronger than them. They are still required to organize synchronized to hunt successfully and avoid casualties. In primitive examples, communication starts with voices and facial expressions. Yet, this type of communication is not solely enough for risk-free hunts. Thus, human ancestors start to use fire and animals skin dresses, in the darkness they drove animal herds towards cliffs. Unlike the former, this type of synchronized organization also requires high-level communication, unlike the previous sounds that everyone reacts they start to use specific voices for specific subjects. Specific action to be taken by a certain subject is represented by the distinctive vocal expression. This phenomenon is the prototype for the language, a high-level communication tool.

Organization, abstraction (imagining, mimicking nature upon functional features e.g. sharp stone to teeth), and *representation* (language) are three attributes of humankind that reciprocally developed the mind which is human's unique tool of survival against nature. The human survival model became the most successful on the earth. Humans were not trying to survive anymore but implementing an artificial system that overrides the features of nature's mechanism. For instance, in artificial human organizations, natural selection is not a factor that regulates the survival of future generations. Instead, artificial selection, which is the outcome of human systems, highly controls not only humans but also plant and animal populations and species within the impact zone of humans.^{35 36} The artificial selection mechanism is more variable in contrast to the observable nature of natural selection. The arbitrariness of artificial selection parallels with the changing focal

³⁵ National Center For Biotechnology Information, 2009: Artificial Selection.

³⁶ A. Sapkota and S. Aryal, 2020: 17 Differences Between Natural and Artificial Selection.

point of power. Therefore, the output of artificial selection correlates with the demands currently dominating the organizational model of human beings.

2.1.1.2 Inquiries on Artificial Social Systems

When mankind overcome nature, the struggle is no longer against nature but takes place between different types of organizations among human tribes. If we reduce the potential, possibilities, and capacity of a group of people to realize their will to a single parameter under the concept of power, arguably one of the greatest inputs of this power might be the organization models.³⁷ Organization models could also be inspected as a subject of the concept of power and power relations as Foucault argued. The answers of why and how an organizational model should be express the design principles of the city as well. Because the city is an altered environment that is mainly the product of the organization.

It is vital to highlight that rigid separations between disciplines are artificial. Categorizing knowledge, and abstracting things are done to be able to control knowledge as well as increase our capacity to analyze.³⁸ The outputs of each discipline affect and change the overall knowledge of other disciplines and humanity itself. For instance, the analytical implications of biology have been used as a tool for centuries, both in questioning the existing artificial system of humans and in presenting model suggestions for the exploration of new social order. One of the most well-known instances of this condition is, as aforementioned, Darwin's theory of evolution, which analyzes the survival mechanisms of nature and gained a place in the discipline of biology, which was used as a tool and cause in

³⁷ Michel Foucault, *The Order of Things: An Archeology of the Human Sciences*, 1966, 2002: 55-62.

³⁸ Michel Foucault, 1966, 2002: 136-139.

questioning the social order within the episteme of its period.³⁹ Thereafter, the theory of evolution also constituted an example in the organizational models developed afterward. Darwin's theory of evolution, as in Galileo Galilei and Giordano Bruno,⁴⁰ was contradicting with the discourse that religion-centered authority had made itself legitimate. Thereby, it was used as a reason for questioning the existing authority, as a tool to the legitimization of objectivity as a focal of power, and as a model for the construction of subsequent social orders. As an illustration, the neoliberal economic model, which is the dominating system in today's world, asserts that it takes Darwin's theory of evolution as a prototype and thus, claims to earn its legitimacy through rationality. Well-known mottos of neoliberalism, such as *free-market*, *encouragement of competition*, *laissez-faire* can be described as reflections and interpretations of Darwin's iconic statement that encapsulates the theory of evolution, "*survival of the fittest*".⁴¹

However, the attempt to change what already exists is only meaningful when it provides something further. At this point, it is subject of inquiry, whether the social system developed to propose a step forward on the natural existence should be derived from the existing conditions of nature itself. It should be pointed out that there is a semantic difference between *adopting objectivity* and using it as a *means of legitimacy*. The difference is, in the latter case, the subject does not concern with what the truth is; rather it is used as an illusion to persuade others of the situation by one's will. Nevertheless, this condition directly contradicts the concept of rationality. Rationality requires the courage to stand with honesty against reality even if it contradicts the will of one.⁴²

³⁹ Helen De Cruz, 2017: Religion and Science.

⁴⁰ University of Washington, 2005: Bruno and Galileo in Rome.

⁴¹ Allen Ruf, 2005.

⁴² Metaphor. Red Pill: "beliefs, choices, or information that allow you to see the world as it really is, even though you would feel safer or happier if you did not. This refers to a scene

In 1902, Peter Kropotkin⁴³, in his book '*A New Factor In Evolution*' gives examples of mutually benefit-based relationships between living things. For instance, fruiting plants meet the nutritional needs of the living being that eats its fruit, while the mobile creature helps the plant to reproduce by carrying the seeds inside the fruit. Kropotkin has shown that competition is not the only reality of nature but one of its dimensions. According to him, cooperation is a mechanism that is superior to competition because it opens up possibilities that competition cannot offer.⁴⁴ Inferences of Kropotkin showed that there is no simple and constantly linear truth of existence; actions and necessities might change according to conditions and complexities. Thus, as the level of complexity increases in the system, it might also require an enhancement of the proposed solution. As occurred in Darwin's case, Kropotkin's theory became a tool to inquiry into the arbitrariness of the social order created by humanity. Kropotkin's work constructs the axiom of political discourse known as anarchist-communism.^{45 46}

The search for an answer on how the organization is possible, which is the stem of the artificial human systems ought to be, repeats itself. The definition of the organization requires a more inclusive, unbounded, and wide-scope description domain rather than characterizing it on its primordial instances as a *survival mechanism*. Then we could ask the question, why do living entities cooperate or organize? This question might be answered again as such; to achieve a mutually

in the film "The Matrix" where a character is offered a choice between a red pill, which reveals the true world, and a blue pill, which keeps it hidden". In Cambridge Dictionary, n.d.

⁴³ Peter Kropotkin, 1902.

⁴⁴ Peter Kropotkin, 1902: 9-11.

⁴⁵ Martin A. Miller, 1998-2020: Peter Alekseyevich Kropotkin.

⁴⁶ P. Avrich and M. A. Miller. "In his theory of "anarchist communism," according to which private property and unequal incomes would be replaced by the free distribution of goods and services, Kropotkin took a major step in the development of anarchist economic thought". In Encyclopedia Britannica. n.d. Accessed (15 Dec 2021) <https://www.britannica.com/biography/Peter-Alekseyevich-Kropotkin/Return-to-Russia>

beneficial goal(s). Yet, regardless of the model of organization, the state of cooperation binds the actions of all participants of the organization with a set of rules. A well-known example might be a simplification of the long-lasting mutual relationship between dog and human, human provides regular food and shelter for a dog as long as the dog acts in line with the human's request. In this example, there is a situation in which benefits can be provided for certain obligations.

According to the given arguments, an organization might be understood as a sacrifice (contribution) from apriori benefits of an individual to reach the greater goal (benefit). Eventually, this means, participating in an organization means sets limits on an individual's freedom. However, if it means limiting the freedom, under which circumstances the organization could be justified? To address and argue this question, the concept of organization is deconstructed further to its elements.

2.1.1.3 A Reason for the Organization

An organization in another sense could be understood as an agreement between participants. An agreement is a consequence of the correlative decisions of individuals. An organization starts with an explicit or implicit result of decisions. In 1944, John von Neumann and Oskar Morgenstern attempted to render the process of interactive decision-making to be represented on the cartesian dimensions.⁴⁷ Today, in the literature, the theory known as *the game theory* represents a mathematical model of interactive decision-making. Game theory is currently used by scholars from various disciplines (mostly in economics) to be able to rationalize and analyze multidimensional decisions. Within the scope of game theory, “*All situations in which at least one agent can only act to maximize his utility through anticipating (either consciously, or just implicitly in his*

⁴⁷ J. von Neumann and O. Morgenstern, 1944.

behavior) the responses to his actions by one or more other agents is called a game.”⁴⁸ The game theory divides games into two basic categories, as they involve two different behavioral states. These are cooperative and competitive games. Given conditions bear the resonance of Darwin’s evolution and Kropotkin’s mutual aid.

As indicated in the description of the game, the game theory attempts to rationalize and reveal the organizational breakpoints, by representing qualitative parameters in the dimensions of logic as much as possible. Thus in this study, the game theory is used to inspect, compare, and analyze organizational models. One of the downsides of the game theory is the fact that it ignores situations where indirect benefit occurs. For instance, it might be found irrational to 'raise a child' since it could not provide a direct benefit for an organization from the perspective of game theory. Or in another case fully rational grounds may result in paradoxical situations as described in the pattern problem of the *tragedy of the commons* (or in another example *Newcomb's paradox*).^{49 50} This is another reason that the game theory was chosen as a tool for inquiry as it reflects paradoxical outcomes to articulate the description of rationality. Eventually, game theory is not regarded as a flawless representation model of truth. Nonetheless, game theory as an attempt of rationalizing decisions should not be disregarded. This study does not focus on the internal working of game theory but uses its outcomes as reasoning as a notion of the 'black box' model.⁵¹ From the perspective of game theory, competitive games refer to winner-loser situations. The outcome axiom of game theory provides when an individual competing with others, it makes sense to choose the course of action

⁴⁸ Stanford Encyclopedia, Game Theory, 1997, 2019.

⁴⁹ Margaret E. Banyan, "Tragedy of Commons". In Encyclopedia Britannica, n.d. Accessed (14 Dec 2021) <https://www.britannica.com/science/tragedy-of-the-commons>

⁵⁰ Tom Stoppard, Dark Side [Radio Play]. 2013. Accessed (14 Dec 2021) <https://www.dailymotion.com/video/x14yvi7>

⁵¹ "Black box models are simply the functional relationships between system inputs and system outputs". In Sciencedirect, 2010.

that benefits the most no matter what opponents decide to do. This condition is called *Nash equilibrium* and is explained by the example of *the prisoner's dilemma*.⁵²

On the other hand, cooperative games are where every player has agreed to work together toward a common goal, the rationale of a cooperative game is to “*accurately evaluate on each player contribution to the coalition as much as possible and how much they should benefit from it*”. In other words, the rationale for the cooperative game is to find out what is fair. The state of 'fairness' is attempted to be represented on quantitative values through a solution concept known as *Shapley Value*.⁵³ From the perspective of the participant of an organization, if contribution and share have a fair balance provided by the organization, then it is rational to participate in the organization. The fundamental outcome of cooperative game theory is the perpetuity of cooperation is bound to the persuasion of participants on a fair contribution/share rate. However, since real-life complexities are not always to be easily represented in the cartesian dimensions, the persuasion of the state of fairness might be also an illusion as well. In other words, an individual agreement on participating organizations may not necessarily mean that organization is providing a fair benefit for the individual.

The conceptualizations of organization and cooperative game theory are fundamentally the same. Therefore, an organization could be re-topologized under a cooperative game body. At this point, we could state that the organization is logical and rational as long as it can provide a reasonable benefit to the individuals who are part of it. Nevertheless, the goal or parameters of the goal upon which a

⁵² Prisoner's Dilemma is mathematical problem to argue and represent competitive game theory. See. Prisoner's Dilemma, In Stanford Encyclopedia of Philosophy, 1997, 2019.

⁵³ See. Shapley Value, In Sciencedirect, 2015.

consensus has been agreed might change by conditions. Consequently, a tension between sacrifice and the goal reveals as the parameter of tolerance that seals the breakpoints of the state of cooperativeness.

Tolerance appears as an impure but indispensable parameter for the organization. As complexity increases in an organization, proportions, sacrifice, and goals are also going to be affected by the parameter of change. Under these circumstances what makes the organization rational and sustainable is its adaptability to change and keeping the stated range of tolerance⁵⁴ between the breakpoints of cooperativeness. This abstract scale will be mentioned in the following chapters as *the tolerance space*. The notion of tolerance itself is also referred to as a range of acceptability, a space between dichotomous extremities. It is easier to form a tolerance space in concrete forms in simple organizations,⁵⁵ however, as the level of complexity increases in an organization, the number of parameters of the variance of participants, expectations, a variety of goals also increases. At this point, the concept of tolerance requires a deeper analysis. The organization is an agreement that an individual makes with 'others' for an individual or common or individual purpose(s). The individual is the explicit parameter of the organization that we know; others reveal the implicit participant(s) parameter of the organization. The concept of others is discussed in many theories in social sciences. The spatial conceptions of heterotopia⁵⁶ devised by Michel Foucault could represent an example. The other is a categorization done by an individual by placing a line between *us* and *them*. The general mistake people do about the

⁵⁴ This study uses the phrase tolerance space in multiplicity of meanings, sometimes expressing an actual space while sometimes expressing an abstract decision.

⁵⁵ Example of Fair Cake-Cutting Problem is to argue rational distribution of share and interested part within an cooperative organization. See. David Wagner, 2009: Cake Cutting and Fair Division Algorithms.

condition of *othering* is the consideration of the concept as a static discrete⁵⁷ phenomenon. However, othering is a continuous expression, a discretization that is about our scope of perception.

The elbow point, which is a statistical method of discretization⁵⁸, can be used as an analogy in understanding this situation. The elbow is a point that refers to a line of separation between samples where the differentiation is maximized. People instinctively set a limit of othering where they see the differences are maximized in their scope of perception. Within the context of an organization, changing the scale of difference will also change how we categorize people like us or others. If we assume nation as a universal set, the ones who have the same language and same culture become us while the rest are others. In the case of encountering extraterrestrial intelligence, all of the earthlings become us, while outer space creatures become others. From an individual point of view, on the consideration that the organization is an agreement with others, the organization may involve, merge, dissolve, and conflict with other organizations. It can include-exclude the person or sub-organization. Because of the reasons indicated above, the consideration of othering is about the scale of perception. However, in human organizations, due to instinctive nature, the individual usually chooses one of these scopes to put their limit of othering. From an individual perspective, the 'us' side of the limit in the organization represents a cooperative body, while 'other' represents the competitive.

⁵⁶ See, Duygu Hazal Simser, *Unfolding and Reframing Heterotopia within the Context of Peripheral Consumption Spaces*, 2018: 1-3, for the spatial interpretation of heterotopia.

⁵⁷ "Discretization is required for obtaining an appropriate solution of a mathematical problem. It is used to transform the initially continuous problem which has an infinite number of degrees of freedom (e.g. eigenfunctions, Green's functions) into a discrete problem where the degree of freedom is inevitably limited. This limitation is necessary due to the finite nature of the subsequent calculation process". In TU Wien, 2008. Retrieved from (14 Oct 2020) <https://www.iue.tuwien.ac.at/phd/spevak/node9.html>

⁵⁸ Robert Grove, *The Elbow Method*, 2017.

The power or potential of the organization does not directly lie in the magnitude but its complexity. And, the key factor that determines the complexity of the organization is the variance of 'others' that the organization could include and regulate. Even though the complexity of the organization increases the potential and the power, it also causes an organization to become volatile, as the number of participants that must provide interest and the diversity of expectations of those participants also increase. As a result, greater complexity in the organization requires a higher level of tolerance. However, although the complexity and tolerance parameters within the organization increase, the potential of the organization this development does not progress forever linearly. This situation could be seen in the description of Karl Popper as encapsulated in the description of the *paradox of tolerance*.⁵⁹ Thus, a mathematical representation model is attempted to be developed addressing Jacques Derrida's concept of binary oppositions⁶⁰ to examine the mechanics of tolerance.

2.1.2 The Tolerance Between Dichotomous Extremities

A dichotomous extremity is a pair of concepts that are opposite to each other but whose existence could only be expressed in conjunction with the opposite. For instance, entropy-purity could be given as a scalar example of dichotomous extremities which are widely used in statistics and chemistry, like form or process infinite-finite, as a behavioral condition of instinct-will, in terms of morality bad-good, in terms of social systems anarchy-autocracy might exemplify the dichotomous extremities. The pattern-wise example of dichotomous extremity could be chaos and order. Although chaos and order are opposed to each other,

⁵⁹ Karl Raimund Popper, 1945, 2019: 548-550.

⁶⁰ Kate Nesbitt (Ed.), Derrida, Jacques (interviewed by Eva Meyer) (1986). "Architecture where Desire can Live": 142-146.

they are interconnected expressions; one can only be described through the lack of the other. In other words, we cannot perceive order without the conception of chaos or vice versa. Therefore, it is not possible to mention absolute- chaos or order in reality. Points of absolution are where the other concept ceases to exist. In this case, absolute order or chaos could only exist hypothetically in the abstract plane of mathematics. However, as indicated before, the disappearance of one of the oppositions in dichotomous extremities, makes the other an absolute reality; under these circumstances disappeared one would not be able to be perceived anymore.

This condition could be better understood when the concepts that can be considered as dichotomous extremities are visualized by placing them on a linear scale. If we consider this scale in two-dimensional Euclidean space, we could superimpose chaos to zero and order to one. Thus, abstracted from the change, any frozen state of reality could be interpreted as a contradictory mix between chaos and order. All the situations and conditions consist of the proportional changes between these two extremes. For instance, we cannot think of nature as absolute zero because it provides the necessary conditions for us to live, yet it is always standing against us, each living being has to strive, to act, in nature to continue living; nature is chaotic, but it is not the pure chaos. As opposed to the previous, we cannot separate ourselves from the chaos of nature truly, in terms of a dimension in which everything is systematized and regulated in the cartesian system; thereby we cannot think of absolute order either.

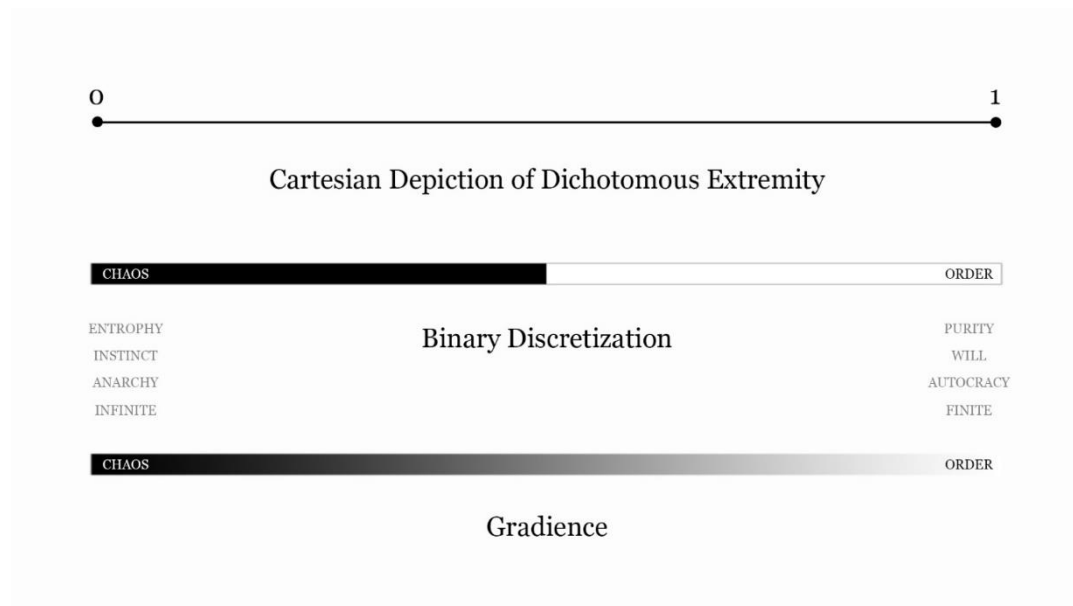


Figure 1. Graphical Depiction: Dichotomous extremities, binary discretization, and continuous gradience.⁶¹

Statement change in the scale dichotomous extremities are always multidimensional trade-offs: chaos offers freedom, creativity, possibility but also dispersion; while order offers control, stability, and predictability on the other hand it suffers from rigidity. An attempt to change the state in reality, as human ancestors did once, may not provide what has been sought when the perception of existence is interpreted as switching the states between binary discretized conditions of bad and good. Even if it is impossible to reach the maximals in the gradient of dichotomous extremities, approaching limit points will also cause problems. These problems will be argued and illustrated within the instance of dichotomous extremities expressed under the name of *the problem of definition*.

⁶¹ Graph produced by the author.

2.1.2.1 Problem of Definition

Definitions specify the nature (quality, boundary, meaning, ...) of the concepts to which they refer. They state certainties; they identify properties. At the same time, they raise problems when they ignore the interwoven relationships, which manipulate the defined 'concept'.⁶²

The problem of definition could be started to be evaluated within the scope of linguistics then applied to other disciplines. When a concept is strictly defined, it is sealing the limits of abstract information and grants certain inter-consciousness intelligibility to the concept it refers to. However, it also prevents it from further improvement or evolution which could be revealed as the problem of definition. If we think of the problem of definition in terms of dichotomous extremities, it is possible to superimpose the chaos-order scale on the problem of definition in linguistics. We could set the universe of thoughts representing the chaos side of the scale, while the rigid definition is the order. It is not possible to reach absolute chaos, since our thoughts are limited with what we perceive and think; on the other hand, it is impossible to reach absolute order either as a definition that has absolute precision which each word could not change or alter. However, even without reaching these points, getting closer to each side would also cause problems. Phenomena of semantic shifts⁶³ could exemplify this situation. Michel Foucault gives the changes in the meaning of disciplines in biology, linguistics, and economics.⁶⁴

⁶² İnci Basa, 2000: 101.

⁶³ Blank, Andreas, Why do new meanings occur? A cognitive typology of the motivations for lexical Semantic change, 1999: 61-68.

⁶⁴ Michel Foucault, 1966, 2002: Classifying.

The description of a concept could only be possible within a blending tone of dichotomous extremities; oscillation range in between those two points. This gives us two limit points on both sides of the scale, the inner zone would provide *a range of acceptability*. Thus, a description should neither be too rigid nor too generalizing. An example of this situation might be digital currencies, classical definitions of money,⁶⁵ usually matches the consensus of that money as a uniform trade meta as an object. However, the reason for money could be rendered on different scales, in terms of digital currencies the money was no longer an object itself but well-kept information of wealth.⁶⁶ This description provided the same solutions for the problems that resulted in the existence of money as an object, but with enhanced security and anonymity. If we bind ourselves to the rigidity of definition and consider money as an object such a concept could never have existed. A secondary example might be no-definition concepts, for instance, there is no definition for mathematics⁶⁷ or art,⁶⁸ but mathematics defines a certain range of subjects to be perceived in the 'universe of thoughts' thus rather than a rigid definition, it bears a range of oscillation between dichotomous extremities, thus it grants it certain intelligibility (and polymorphism unlike the description) without encapsulating it in fixed scale. But there is a set of concepts that the word mathematics bears on each person's mind.

Another example might be given from the theory of representation,⁶⁹ once mankind invented computers, there was a question of whether computers be capable to

⁶⁵ "Money: Something generally accepted as a medium of exchange, a measure of value, or a means of payment". In Merriam Webster Dictionary, n.d.

⁶⁶ Satoshi Nakamoto, Bitcoin: A Peer-to-Peer Electronic Cash System, 2008: 1-3.

⁶⁷ Renate A. Tobies, Iris Runge: A Life at the Crossroads of Mathematics, 2012: 9.

⁶⁸ "The definition of art is controversial in contemporary philosophy. Whether art can be defined has also been a matter of controversy". In Stanford Encyclopedia of Philosophy, 2007-2018.

⁶⁹ "In some abstract branches of mathematics, the term "representation" has a similar but more technical underpinning, and is generally used to assert the similarity or the

simulate the human brain someday, the machine could ever think as humans did? The question was then in an obscured state. John McCarthy proposed a rhetorical answer to the question.⁷⁰ If mankind could achieve to represent the internal workings of brain activity in mathematical dimensions, then we could create artificial intelligence. McCarthy's process of thinking was originated from the actual working of computers, on the interpretation, the computer was a machine that is representing and controlled information in binary electrical prisons. From that perspective, if anything could be represented and captured in logical dimensions, it could be simulated, modified, or altered. Although it was found controversial in his age, today even we could not yet manage to create artificial intelligence in full capacity. Today's technology is capable to simulate the process of decision-making which once could be thought of as impossible.⁷¹ McCarthy's description provided a starting point. A clear limit in the universe of thoughts makes us capable to invent such technology through *information theory*.

As described in the introduction, within an understanding that the problem of definition as a paradox of dichotomous extremities, rather than binding our understanding of the city to a certain definition this study attempts to describe the city and all fundamental concepts of inquiry in pattern-wise scope. The city is an altered environment is the starting point, the widest cluster that this study could fit the concept. However, not all altered environments are a city. At this point, systematically start to narrow down or anneal the range of definition. The same approach is used for describing organization and tolerance. Upon rendering the problem of dichotomous extremities on the problem of definition, it could also be

equivalence between two structures using concepts such as homomorphism and isomorphism". In Mathvault, n.d.. Retrieved from (14 Oct 2020) <https://mathvault.ca/math-glossary/#representation>.

⁷⁰ John McCarthy, What Is Artificial Intelligence?, 2007.

⁷¹ E.g. machine learning, deep learning, artificial neural networks.

used to evaluate the roles of parameters of tolerance and complexity within the organization.

2.1.2.2 Paradox of Tolerance

In the previous section, from the scope of the organization, tolerance is defined within the organization as a range of acceptability between contribution and benefit. In a wider context, it could be regarded as a parameter to accept opposition/differences. As it describes a range within a linear scale of extremities, tolerance itself is a problem of dichotomous extremities. According to the game theory, it is not rational to contribute without acquiring any benefit from the organization, likewise, from the opposite perspective, an individual cannot fully benefit from an organization without contribution. Yet, although reaching abstract extremities are impossible, unfair states of contribution or benefit would also cause problems. If the sacrifice is relatively greater than the benefit of the individual, we could interpret this situation as the exploitation of individuals by the organization. If the benefit is relatively greater than contribution, we could say exploitation of organization by the individual.⁷² Under both circumstances, since the rules of the organization are not providing a rational balance, it reveals a state of conflict within the organization.

Conflict either results with the dispersion of organization or results in the reduction in the willingness of the participants.⁷³ Since, the organization is not being able to provide a rational value for an individual, off the record, it 'excludes' the individual from the organization (this condition could also be named as segregation of classes). Through exclusion, the complexity of the organization decreases.

⁷² Individual is a placeholder to refer to unit of participant. It could be individual, unified group, or other organization.

⁷³ Participants still contribute to organization forcefully or obligatory reasons.

However, the complexity of an organization is what determines, adaptability, creative capacity, possibility, and impact of the organization. This condition could be resembled by a preliminary example of this study. Humans are not the only living beings that are capable to alter the environment. What distinct the city from other altered environments as well as the human organization from the cooperative actions of other living beings is the parameter of *systematic complexity*.

The concept of complexity can be considered as a dichotomous extremity problem as well. In terms of organizational complexity, extremities could be exclusiveness and inclusiveness. As previously stated, change in dichotomous extremities always comes with trade-offs, when the system started to act inclusive i.e. complexity increases, it also becomes volatile since participants and their expectations would also increase. When the system starts to become exclusive it becomes more stable but its complexity decreases. Therefore, as complexity increases in an organization, a higher range of tolerance becomes a necessity. However, it can not grow infinitely due to the problematic condition of dichotomous extremities. Karl Popper mentions the paradox of tolerance. Although he refers to the concept of 'tolerance' as infinite quality, the description of the problem is this infinity. Popper states: *"unlimited tolerance must lead to the disappearance of tolerance. If we extend unlimited tolerance even to those who are intolerant."*⁷⁴ If society becomes tolerant of intolerant; eventually they will be persecuted by the intolerant. What Popper did was to interpret the concept of tolerance in the plane of mathematical limits and to reference a range between these extremities. In other words, if an organization includes a unit whose aim is to 'use' (excessive benefit) the organization rather than 'contribute' (rational balance between organizational sacrifice and benefit) this condition would eventually result in conflict in the organization. Thus organization should provide a rational range of balance (from the perspective of game theory,

⁷⁴ Karl R. Popper, 1945, 2019: 580-583.

we could name this rhetorical description of acceptable Shapley value) between the contribution of participants and their benefits while striving to maintain or increase its complexity. Complexity is suggested as the key parameter in the quality of an organization. And, organizational complexity is dependent on tolerance and willful contribution. However, none of these parameters refer to linear progression behavior, rather as indicated above they are only useful within the range of tolerance space.

2.1.3 Tolerance Space as a Framework of Criticism

Once human systems were attempting to override nature's conventional mechanisms, new sets of requirements, complexities, and relations occurred. Concepts of morality, trade, ethics, religion, states, etc. could be given as examples of institutions and concepts that propose an artificial set of rules to manage given complexities.⁷⁵ However, all the artificial systems humans developed, propose a set of advantages and disadvantages and build their problematic condition i.e. balance of chaos and order. As a system is a matter of constant change, there appears a need for a critical mechanism that constantly inquiries whether the artificial system produced by humans is functional (or does it suggest a rationale for the state of cooperation) under the changing conditions. In this study, it is suggested, the organization should be capable to adapt these changing relations to be able to protect its rationality. Thus, the aforementioned critical mechanism becomes another necessity for the organization.

⁷⁵ "Law, the discipline and profession concerned with the customs, practices, and rules of conduct of a community that are recognized as binding by the community. Enforcement of the body of rules is through a controlling authority". In Encyclopedia Britannica, 1998-2019.

Thus, it is considered to be valid points to inspect in history where drastic changes in social systems occurred as they do often realize as an act of criticism. The phrase 'new age' is used to refer to the change in the social structure over an ideal. Habermas points out that inquiry attempts of great social changes as Renaissance, Enlightenment, and Modernism and counterculture of 1960 according to the core idea they bear could be classified under one structure. He describes this process as *the unfinished project of modernity*.⁷⁶ Using the framework of Habermas provided this study to sketch a critical mechanism that is considered a must to establish a rationale for the organization.

2.2 Modernity as Critical Mechanism

Modernity and its related concepts are a wide-scope placeholder that is suffering from a multiplicity of meanings as indicated in the problem of definition. Especially beyond academic domains, frequently, it is used to refer to an age, a condition, a theoretical framework, a style of art, or the condition of an object. Additionally, it is used as a synonym for concepts such as contemporary or timely. And occasionally, it is used like an obscure, implicit adjective or noun to ornament a statement beyond academic domains. Also, people use the words *modernity*, *modern*, and *modernism* interchangeably, to indicate a variety of meanings.

A word, in linguistic terms, is an encapsulation of properties that should more or less correspond to the similar object(s) or properties between the sender and receiver to maintain healthy communication. To avoid an obscured state, this section starts by indicating the terminological use of the concepts within this work. What is modern, modernity, and modernism, what makes the difference between

⁷⁶ Jürgen Habermas, 1981, 1997: 38-55.

those concepts, and why are stated descriptions are preferred, will be attempted to clarify.

- *Modernity* is a paradigm, a theoretical framework of handling as well as demanding change. This approach will be articulated further.
- *Modern* refers to a style or condition of objects or actions correlated with the paradigm of modernity.
- *Modernism* is a discourse bound to a specific period and people which may include or exclude in time where actions taken into account to modernity were dominant. However, the contractions are these actions are not always in correlation with modernity.⁷⁷

Various pieces in different works and mediums such as Pablo Picasso's *Guernica*, Le Corbusier's *Five Points of Architecture*, Beethoven's sonatas, progression in science, technology, industry, and social systems, concepts such as secularism, equality, freedom; all of these seemingly irrelevant concepts and things have common points that make them considered to be categorized under the scope of modernity. Why are they considered to be modern or modernist? Through investigating these common points, the reasons for depicted descriptions and a distinction between modern, modernity, and modernism will be articulated.

⁷⁷ Definitions are not meant to be considered as static. New description zones will be rendered through a contextual mapping.

2.2.1 Paradigm of Modernity

2.2.1.1 Describing Modernity: Patterns of Paradigm Shifts

Jürgen Habermas examined the history of modernity and he noticed that the etymological stem of the word *modern* formed much before than expected. In the doctrine of Christianity, the word 'modern' is used to indicate the 'new age' or a revolutionary change in the artificial order.⁷⁸ Of course, the Christian idea of modern is contradictively different from today's understanding of modern. Yet, the abstract idea was the same: a new age, changing the existing conditions, attempting to tame chaos, brave and bold actions for change no matter how hard they are. Demanding and proposing ideas for a better life. When humans superimposed a new reality over the existence of nature, artificiality, and the organization of human beings was always the focal point of the paradigm of modernity. As an instance of artificial system suggestion of human organization, the Christian idea of modern flourished in Europe through promising a just, fair, and better life as indicated in the core idea of *modern*.⁷⁹ When the authority of Catholic Christianity grasped control and power over the totality of the organization, it became the absolute authority. Catholic Christianity did not provide what it was promised. The absolute authority suppressed the people who are proposing any discourse against their authoritarian will.⁸⁰ This situation caused a period of regression in Europe, due to arbitrary actions of unquestioned authority resulting in many intellectuals and scientists being discriminated against and punished such as Giordano Bruno and Galileo Galilei; criticism and reasoning diminished from the society which resulted in repression, injustice, poverty, and epidemics. Eventually, great sufferings and

⁷⁸ J. Habermas and S. Ben-Habib, 1981: 3-4.

⁷⁹ “Keep this Book of the Law always on your lips; meditate on it day and night, so that you may be careful to do everything written in it. Then you will be prosperous and successful.” Joshua, 1:8. Retrieved From (14 Oct 2020)

<https://www.biblegateway.com/passage/?search=Joshua%201%3A8&version=NIV>

⁸⁰ University of Washington, 2005: Bruno and Galileo in Rome.

losses occurred in society.⁸¹ This condition might indicate, although their initial intentions are the same, two fractions on the understanding of modernity conflict with each other. Under what conditions does the paradigm begin to lose its coherence? Modernity does not indicate any ways of handling or proposing change. An attempt to change could only be considered as *modernist* as long as it could be legitimized by the benchmarks of modernity. What are the benchmarks of modernity? These structures can be identified by examining the major breaking points in history.

Well-discretized periods of the History of Europe constitute a source for the statements of this study since it is well documented, analyzed, and criticized by many scholars. Discretized periods in the history of art and politics of Europe, such as *the Renaissance* and *the Age of Enlightenment* was possible due to erratic changes in the episteme of the era and the society i.e. paradigm shifts. At this point, this study suggests that we see a pattern like repetition in subsequent periods. Some of the common points of the Medieval Era, Baroque, and Romantic era could be named as:

- Subjectivity over objectivity.
- Passion over reason.
- Power collecting in one hand rather than distributed, focal points of authority.

⁸¹ E.g. The Black Death, Great Famine, Response to Heresy, Ordination of Women.

On the other hand the common points of Renaissance, Enlightenment, and Modernism:

- Objectivity over subjectivity.
- Reason over passion.
- Public interest before the clustering of power. As a result, authority weakens, it is held responsible and criticized.

This condition could be represented through the analogy of frequency graph of the pendulum is resembled abstracted topological mapping. If we apply the scale of dichotomous extremities on social organization. We could superimpose, passion, and subjectivity on chaos. Change direction over chaos could be named as an anarchic movement. While reason, objectivity could superimpose the order. Change through the direction of order could be named an autocratic movement.

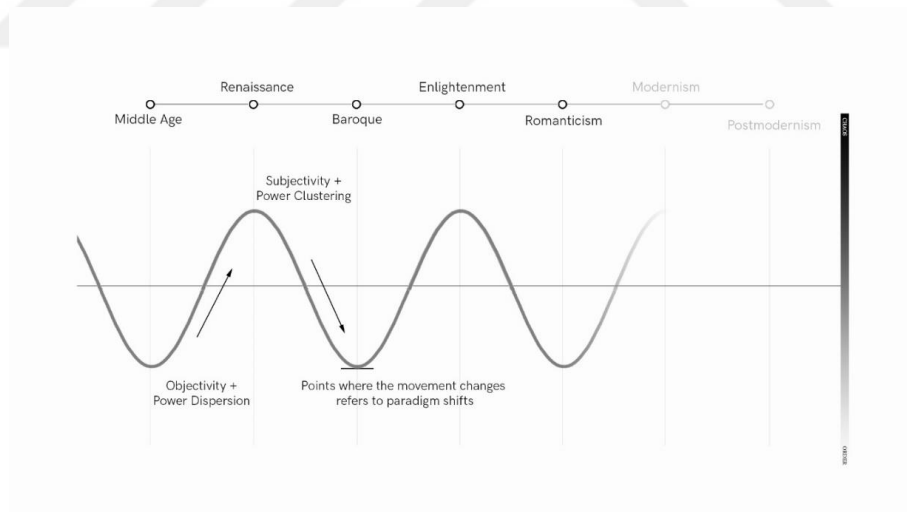


Figure 2. Graphical Depiction: Superimposition of pattern-wise similarities of paradigm shifts on harmonic movement.⁸²

⁸² Graph produced by the author.

Social organization oscillates in a range of anarchy and autocracy. However, as indicated paradigm shifts occur when the direction of movement changes between binary oppositions. As indicated above, even though it is impossible to reach theoretical maximals, approaching limits also presents problematic conditions. And, in either end, an approach to a maximal will result in the maximization of conflict within an organization. Thus, the direction in the movement of change occurs. Habermas' modernity does not aim for any change, but a change that could represent a progression, a change towards the better. Thus, the paradigm of modernity ultimately aims to draw limits of oscillation, a tolerance space, between multidimensional dichotomous extremities of chaos and order, instinct and will, anarchy and autocracy, subjectivity, and objectivity, passion, and reason.

2.2.1.2 Concepts and the Condition of Modernity

Modernity is a collaborative project of humanity. Forming the paradigm of modernity is an evolving process rather than a structural one. Thus, it is suggested statements should not be regarded as axioms, but a base to be sculpted towards something better through the cooperative effort of humankind.⁸³ Although it is not possible to express *modernity* with a few people, only a few concepts and their creators are mentioned due to the limit of the study. Those benchmarks are the concepts of objectivity⁸⁴ and criticism⁸⁵ (to others *skepticism*⁸⁶, or oneself *the inner-honesty*⁸⁷) and methods of abstraction⁸⁸ and representation.⁸⁹ To evaluate the

⁸³ "Simulated Annealing is a method for approximating the global minimum of a generated path geometry function over a large search space possessing non-linearity and discontinuity (Martínez-Alfaro and Gómez-García 1998)". In Sciencedirect, 2011.

⁸⁴ René Descartes, 1637: Part IV-Part V.

⁸⁵ Immanuel Kant, *The Critique of Pure Reason*, 1781: Section III. System of Transcendental Ideas.

⁸⁶ Bertrand Russell, *A History of Western Philosophy*, 1945: 491-495.

⁸⁷ Friedrich Nietzsche, *Thus Spoke Zarathustra*, 1885: 88-92.

actions of change, or system suggestions for the society it is suggested to use modernity as a critical framework. By *modernity*, it is suggested three dimensions for criticism that are freethought justice and progression. The problem of definition will be evaluated on modernity to form a description as well as a causality regarding its relationship with these concepts. A few of the most accepted definitions describe modernity as new age, innovation, actions against tradition,⁹⁰ and taming the chaos. In the widest scope, this study suggests the description of modernity as handling and demanding change. However not all attempts to change could be regarded as modern. Thereby, the scope of description narrowed down: set the limits between the universal set of concepts. The state of progression should not be determined through subjective desires but the axioms of logic, albeit rarely, constants of life. As a result, objectivity becomes the prerequisite for freethought which is different from solipsism.

On another fold, although modernity acts within the constants based on reality, it stems from imagination, an idea that is capable to superimpose existence. There appears a dichotomy within modernity itself. Modernity stands between existent and imaginary. It is not solely, a product of fantasy, anchors itself within the constant of reality. And, it does not derive all of its concepts from the conditions of existence itself. Modernity stands for unending reallocation attempts between chaos and order. Therefore, it is unable to define modern as a linear condition that we have to achieve. To reach better objectivity, we need collective subjective ideals to anneal better for the whole. Modernity aims for the sustainability of the organization in the greater possible imaginable frame. Therefore, modernity is there for the public. In reality of constant change, an ideal should not propose a

⁸⁸ Friedrich A. Kittler, *The City is a Medium*, 1996: 718-721.

⁸⁹ "Representation is the use of signs that stand in for and take the place of something else". William Mitchel, 1995: "Representation".

⁹⁰ Michel Foucault, *Discipline and Punish: The Birth of Prison*, 1977: 170-190.

frozen state. As it progressed, the perspective of consciousness will also be capable to perceive new dimensionalities. A step of progression that is conceived as reasonable may lose its reasoning in time. The description of modernity shows a correlation with the praxis of the time when humanoids started to use and change nature. Modernity is an attempt to change reality with a progressive step unbounded from individual desires. *An emancipatory project from the cruelties of existence.* The paradigm of modernity finds one of the strongest resonance in discursive level within the discipline of architecture. The fundamental aspect of architecture is to change the existent with an idea, in other words, creating a new reality. The human organization has managed to superimpose a new system and therefore, arguably succeeded to manipulate the conditions of nature. At this point, it seems appropriate to discuss the conceptual boundaries that will determine the limits of the tolerance space of the organization within the problematics of modernity, since the reasoning of the organization correlate with the ambitions of modernity.

Thus, an attempt of change could be qualified as modern if it is proposing a step of progression that stems from objectivity, multidimensionality, open-mindedness, and constant criticism. Based on the given description, why is modernity considered to be a phenomenon of change? And, what are the problems in generally accepted definitions? One of the widely accepted definitions for *modernity is not an attempt to tame the chaos towards order.*⁹¹ From the perspective of dichotomous extremities, when a human organization attempts to liberate itself within the rigidity of autocracy, actions that are evaluated within the scope of modernity could be interpreted as chaotic rather than orderly. Secondly, *modernity is not an action against tradition.*⁹² Modernity itself is the inventor of

⁹¹ Vito De Lucia, *Semantics of Chaos: Modernity, Law and the Commons*, 2018.

⁹² Michel Foucault, 1977: 170-190.

tradition. Traditions are artificial rituals that were once offered as *new*. Invented to regulate new conditions of human organization. The problematic condition of tradition is a result of rigidity and ignoring to change or lost its roots with reasoning or changing conditions. When the proposed solution is separated from criticism, it stops evolving and becomes frozen with rigidity. For instance, education could be regarded as a tradition. However, when it eliminates criticism within itself, it becomes indoctrination. Thus, modernity itself is conceived as an attack on the tradition which is a recursive product of its own. Modernity is considered as *handling and demanding change*. *Demanding* is a result of the cruelties of existence, *handling* refers to the aforementioned limits and methods. In this context, modernity strives to develop a new reality that could override conditions of existence. To exemplify 'the cruelties of existence', it is possible to state some simple observation axioms from nature.

- There is no natural state of justice in existence.
- The conditions that a creature has at the time of its birth determine the rest of its life to a great extent. In other words, 'innate' dominates the 'earned'.
- Tyranny/oppression of the strong over weak i.e. *the law of the jungle*.
- Orphanhood, death, hunger, and famine are natural and frequent phenomena.

At this juncture, modernity aims to allocate justice, normalize the conditions of the living being to eliminate innate opportunities and obstacles, legitimize the earning with labor, create a condition where *the strong cannot dominate the weak*, a habitat that could include all living beings as far as it can reach. It struggles to develop a model through the power of the organization that abstracted from the *tragedies of existence* and aims to superimpose a kinder version of reality. A daring attempt of change that could alter the most rigid conditions of reality is not possible, not least for the individual who is already weak against nature. This implementation can

only be possible through the endeavor of a complex organization. However, the perpetuity and progression of a complex organization depend on the preservation of its causality, as discussed in the previous chapter. Therefore, modernity strives to increase and advance the level of organizational complexity. Creating an organizational model is one of the main goals of not only modernity but many other paradigms. As an example of this, each religion proposes various organizational models. The point that makes modernity different is that modernity does not propose unrequited truth but proposes its reasoning with the constants offered directly by the existence and the ideals that are capable of clinched with these constants. In other words, the fulcrum of modernity is not indeterminable chaos, but a logical constant.

Modernity harnesses the power of organizational complexity to establish justice. To achieve this, it requires an abstract structure that is more powerful than anyone else, but not going to act instinctive or private desires. This order, namely the law, ideally is to there, the fundamental deficiency in nature; to prevent arbitrary actions of the powerful and implement justice. The law, a set of logical axioms is a basal prerequisite to set organizational reasoning and complexity.⁹³ The existence of law is not dependent on any tangible thing but the agreement and adoption of the organization's individuals. The law is a concept that acts within a certain range of tolerance just like modernity. It is an abstract product of organization crafted by the tools of modernity. Judgment should neither derived from an autocratic unit nor directly from the will of society with a populist attitude. If the law acts within the scope of the autocratic unit, it loses its causality as it becomes tyrannical through losing the capability to prevent *the domination of strong over weak*. It becomes the focal point of power, converts the mere subject of the strong itself. On the other side, if the law acts within the expectations of the majority, once again, the law

⁹³ Jack P. Gibbs, Definitions of Law and Empirical Questions, 1968.

makes itself meaningless by prioritizing the majority instead of rationality. If society is already being capable to reach righteousness through the decision of the majority then the concept of law would not be existent and necessary at all.

One of the prime axioms of jurisprudence is that *one can only be judged by mere actions of a decision*.⁹⁴ Since it reveals a mathematical binary statement, the reverse of this axiom is also valid, i.e. the individual cannot be judged for events beyond his/her control. However, preferences are not completely independent from the circumstances that the person has not chosen. The conditions and experiences affect the decisions of an individual as well as consciousness and knowledge. Hence, a major problem with reality emerges, the fact that conditions we cannot choose affect us and our future is the very point at which modernity is against. At this point, the problem stands out-scope of the concept of law. However, this problem directly conflicts with the *earned over the innate* principle of modernity. Thus, modernity aims for a standard to emancipate individuals from environmental factors of decision making. The tool developed for this encounter is education. Education is in a way modernity's coping mechanism with fate; it aims to set a standard to reduce the domination of innate advantages and promote the earned. However, education in terms of modernity is distinct indoctrination⁹⁵ as it can host criticism. Thus, modernity aims to purge conditions that an individual cannot control. In other words, modernity aims to emancipate an individual from fate. It aims for people to devise their identifications and life through choice. Liberty in its true meaning could be considered as having the right to choose, having a will over one's own life. Although participating in an organization might look like a restriction in terms of limits of freedom, it does emancipate an individual from the

⁹⁴ See. Mens Rea, In Cornell Law School, n.d.

⁹⁵ "Indoctrination is the process of repeating an idea or belief to someone until they accept it without criticism or question". In Cambridge Dictionary, n.d.

boundaries of existence. Thus, by limiting through tolerance modernity legitimizes the organization.

The concepts of modernity can be examined in four layers. In the first layer, progression and criticism exist. While advancement is the primary goal, criticism is the mechanism that will make the progress possible. Without criticism, progress can become a singular ideal, transforming into a subjective utopia. Rigidity and deprivation of multiplicity might result in opposite to aimed progression. To depict an ideal over reality, modernity requires constants to grasp upon. In the second layer of modernity, there exists objectivity. In the form of a chain, objectivity demands free thought, and free thought demands justice. As argued on the phenomena of othering, justice could not be discretized. Therefore, in the tertiary layer, modernity embraces multiplicity, inclusiveness, collaboration. These are the points that enhance organizational complexity. In the last layer, as a result of progression and increasing organizational complexity, freedom, prosperity, and welfare occur.

Within this context, it is possible to enhance the suggested description through the parallel perspective of Habermas⁹⁶ modernity as an emancipatory project, an attempt to create an alteration over the cruelties of existence. Modernity *focuses on the pattern rather than instances*. It prioritizes the *public over the private*. It aims at *sustainable solutions rather than consumable or short-sighted*. Modernity, just like law, exhibits neither anarchic nor autocratic attitudes. One of the methods that modernity uses to prevent the authority from being absolute is democracy. Democracy is, as Karl Popper described, a method to prevent power fractions from

⁹⁶ Jürgen Habermas, *The Philosophical Discourse of Modernity*, 1985, 1987: 18-19.

concentrating on a single subject by dispersing the focal points of power.⁹⁷ Habermas argues that the most important concept he studied is democracy.⁹⁸ The concept of democracy has its sub-set of concepts to maintain criticism on authority. Some of these principles could be named as transparency, accessibility, accountability, responsiveness, inclusion, and participation.



Figure 3. Depiction: Layers of modernity.⁹⁹

Nevertheless, occasions, in reality, are usually much more complex in a way that binary discretization of right and wrong would not be adequate. Multiple parameters crossing and affecting each other create chains of causalities, unknowns, and obscurities. At this stage, although objectivity gives the most

⁹⁷ Karl R. Popper, 1974. Karl Popper on the Open Society [Video File]. Retrieved from (14 Oct 2020) <https://youtu.be/s3r8UUiOppc?t=134>

⁹⁸ Jürgen Habermas, Felsefeci ve sosyolog Jürgen Habermas, demokrasi ve toplum üzerine konuşuyor [Video File], n.d., 2018.

⁹⁹ Graph produced by the author.

concrete tools, acting on only what is seen will result and lead us to *parameter bigotry*, and in fact, move us away from rationality itself. To cope with this problem, modernity adopted two methods. These methods are abstraction and representation. These methods are two tools that caused humanoids reciprocally to develop their mind and reach higher consciousness. Roughly referred abstraction is *the process of eliminating unrelated parameters in an equation with too many inputs*¹⁰⁰, and representation¹⁰¹ is *the process of encapsulation of a set of values and concepts with a sign*. The difference between abstraction and representation is due to the representation could be completely arbitrary, while the abstraction is derived from the object's properties. Abstraction and representation are methods used to manage complexity. Managed complexity develops one to enhance and be able to conceive greater dimensionality. Similarly, consciousness grows and develops through methods of modernity. It is possible to examine through the methods and concepts of modernity, why the pieces of art, studies, and works that are considerably different from each other are defined within the framework of modernity. The foremost example could be given as the outcome of the process of the French Revolution. The National Motto of France,¹⁰² “*liberty, equality, fraternity*” corresponds to the concepts of modernity within encapsulated simplicity. Therefore, the French Revolutions could be considered as a mere reflection of modernity as societal change.

¹⁰⁰ “Conceptual abstractions may be formed by filtering the information content of a concept or an observable phenomenon, selecting only the aspects which are relevant for a particular subjectively valued purpose. For example, abstracting a leather soccer ball to the more general idea of a ball selects only the information on general ball attributes and behavior, excluding, but not eliminating, the other phenomenal and cognitive characteristics of that particular ball”. Suzanne K. Langer, 1953.

¹⁰¹ “Representation is the use of signs that stand in for and take the place of something else”. William Mitchel, 1995: “Representation”.

¹⁰² Ministère de l'Europe et des Affaires étrangères, n.d.: Liberty, Equality, Fraternity.



Figure 4. Ugiolino di Nerio, Depiction of The Last Supper. 1324.¹⁰³

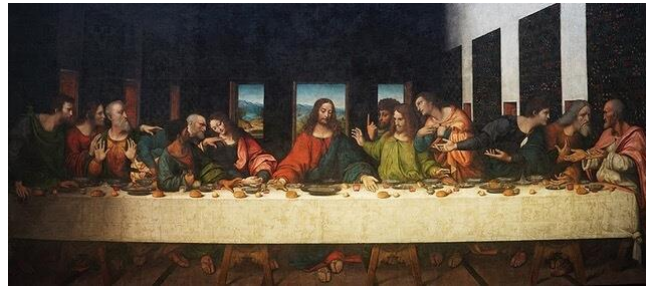


Figure 5. Leonardo Da Vinci, Last Supper. 1520.¹⁰⁴



Figure 6. Georges Braque, Bottle and Fishes. 1912.¹⁰⁵

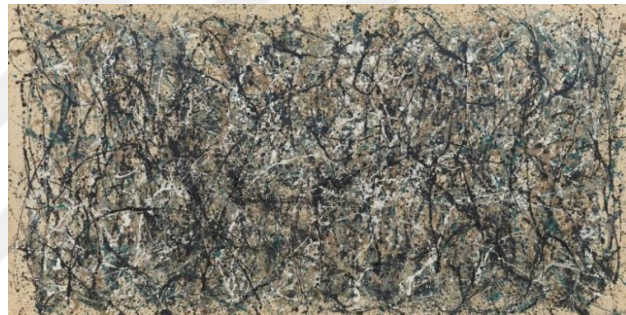


Figure 7. Jackson Pollock, One: Number 31. 1950.¹⁰⁶

¹⁰³ Medieval era painting depicts religious figures lacks depth and perspective. Accessed (25 Oct 2020) <https://qph.fs.quoracdn.net/main-qimg-e772f5361c312a1a057b468bfb45e1d>

¹⁰⁴ Renaissance painting by Da Vinci, linear perspective usage, reduction in holy figures: they represented in sight level (horizon line) without Halo. Accessed (25 Oct 2020) <https://news.artnet.com/app/news-upload/2018/03/Young-Leonardo-Last-Supper-Canvas-Painting.jpg>

¹⁰⁵ Earliest cubist work of Braque. Multiple perspective usage and abstraction. The idea is in front of the figures. Accessed (25 Oct 2020) https://www.tate.org.uk/art/images/work/T/T00/T00445_10.jpg

¹⁰⁶ Pollock's drip painting. High level abstractions, no geometry, or recognizable figures. Accessed from (25 Oct 2020) <https://www.moma.org/media/W1siZiIsIjQ3ODMxNyJdLFsicCIsmNvbnZlcnQiLCItcXVhbGl0eSA5MCA5cmVzaXplIDIwMDB4MTQ0MFx1MDAzZSJdXQ.jpg?sha=a14bf0bde92badff>

From figurative expressions of the middle ages to the multi-perspective of Georges Braque, in paintings, it is possible to trace the gradual transition from *figure to the idea*, instance to the pattern. From Pablo Picasso to Jackson Pollock, artists classified to be modernists used and developed new and enhanced levels of abstraction in their artwork. For instance, cubism uses a method of modernity (abstraction) and represents the concepts of modernity; *multiplicity*, and *perspectivism* as the allegorical reflections of the rejection of a singular perspective, subjective will of *the strongest*.

Another example is Le Corbusier's Five Points of Architecture¹⁰⁷ which could be regarded as an attempt to create a formal language to represent the paradigm of modernity. Le Corbusier is standing against the ornamentation, because, although ornaments are costly, they barely have a function to enhance the dwellers' life. Besides, ornaments are frequently used by the authority as an instrument to display itself and the illusion of power.

- **Pilotis:** Representation of abstraction, the basic unit of construction, that makes it possible to apply the free plan, stripped out from everything unnecessary. The structure is not something to be hidden but displayed proudly.
- **Free plan:** The formal representation of the idea of freethought, a statement that designers should not dictate the dwellers how to live, but give them tools, a shell, to develop their own life. It does not rigidly define but provides a flexible, alterable tolerance space.
- **Free facade:** Unlike the elusive distinction between the façade and interior of churches. The principle of the Free Façade suggests uniform allocation

¹⁰⁷ W. Oechslin and W. Wang, Les Cinq Points d'une Architecture Nouvelle, 1987.

and perception of the building. Within the scope of this study, this condition is considered as a representation of democratic transparency against the people, architecture, should not deceive.

- **Horizontal window:** Windows horizontally splicing non-constructive walls are, as occurred in cubism, are the allegory of perspectivism. Horizontal windows, providing an even distribution of lighting within the building, as a result of this, reduce the hierarchy between different parts it resembles justice.
- **Roof garden:** Architecture as an attempt to change, does not detach itself from nature as an example of absolute order. It 'alters' it and co-exists. It can be evaluated in the tolerance condition of modernity in-between dichotomous extremities of chaos and order.

It is attempted to convey a relationship between events and objects and their links to modernity within the limited scope of this study. It is argued why modernity is considered as an appropriate framework to criticize limits of tolerance on artificial social systems. Here, three parallel descriptions are suggested. Modernity is;

- A paradigm of those set of values that are criticism, freethought, objectivity, and justice aims be able to cultivate a progressive and prosperous environment for living beings amid distressing and chaotic existence.
- An attempt to change existing over an ideal.
- An emancipatory project, an alteration over the cruelties of existence.

An interpretation is presented in this section for some events and works that may appear modern, although they look different from each other. In contrast, some events do not parallel with modernity, although they appear in the discourse of

modernism. At this stage, the 'unmodern' modernism constitutes the next chapter of this discussion. The problems that modernity constantly faces in its effort for change and the methods to manage the increasing complexity will be encapsulated under the name of *the enigma of modernity*.

2.2.2 Enigma of Modernity

Modernity intends to create a non-existent ideal to superimpose conditions of existence. To achieve this, it uses the power of the organization. However, the organization has a balance mechanism that works within a tolerance range. In the case of disturbance, the state of ideal collapses, and the whole system once again return to the conditions of existence. The first and foremost of the organizational factors that cause this problem can be discussed as the problem of absolute authority.

2.2.2.1 The Problem of Absolute Authority

It is attempted to apply the way an organization regulates itself on a scale of dichotomous extremities: we could presume absolute anarchy on the chaos side which we cannot think of any organization, on the other hand, it is possible to presume absolute autocracy on the order side in which every decision is made arbitrarily by an epicenter of power. Even if it is impossible to reach maximals, approaching to extremities also causes problems. Degree of freedom, and dispersion increase, on the movement to the direction of chaos. On the contrary, control and rigidity increase, in the direction of order.

Starting from the order side, if an organization goes beyond order breach of the tolerance space is eventually reaches absolute authority. *Absolute authority is a type of authority that does not require to explain their actions in the context of*

*causality which results in arbitrariness.*¹⁰⁸ Absolute authority ignores the reasoning of the condition that the organization exists. Thus, it cannot establish justice because it cannot prevent the oppression of the powerful, as it comes to the focal of power, the absolute authority functions as a singular unit, separated from the rest of the organization individually. And, it dictates the order of its interest or ideal (utopia) rather than the totality of the organization. The organization loses its property of multiplicity and move towards the utopia of single and powerful absolute authority. In this case, segregation occurs between the governing body and the rest of the organization. The authority defines the rest of the organization as a tool for realizing its ideals without considering the interest of its participants. Because of this reason, Karl Popper criticizes utopianism.¹⁰⁹ This condition, as discussed in the previous chapter, is a situation in which the entire organization is abused by its authority. Authority became an extractive institution.¹¹⁰ The reflection of this organizational segregation also appears in the built environment. Sustainably, the organization is merely set to just existence for all, however absolute authority represents arbitrary actions of the powerful. This condition eventually nothing beyond the conditions of existence it ceases all reasoning of organization. Thus, absolute authority is the primary and ongoing problem of modernity. The alteration that modernity aims for is an artificial system created to change the existing and cruel reality. When the alteration is collapsed, this condition means to revert to primordial conditions of existence. Thus, the organization also loses its reasoning. However, the authority that is acquiring unilateral benefits from the organization, desires to continue their interest. Hence, the absolute authority had to create a perception as if there is an altered state or

¹⁰⁸ See Appendix B: Depiction of absolute authority is visible on the Renaissance art, for more detailed articulation.

¹⁰⁹ Karl Raimund Popper, 1945, 2019: 147-157.

¹¹⁰ "Extractive institutions favor the elite who are in charge, allowing them to pull materials and opportunities from those that live under them". Daron Acemoğlu & James A. Robinson, 2012.

claim that the current condition is the only reality that can exist. The unlikely alteration, this condition is an illusion, a mask to hide.

On the other fold, at the opposite of the limit of absolute authority, there stands the chaos threshold at which the unity of people disintegrates and individual utility surveillance is maximized. The refuting situation of the chaos threshold is more obvious. While there is no order in nature if this condition was good enough, humans would never required to organize. Nevertheless, in the process of disintegration of the organization, the chaotic movement could not reach the maximal. When the society reaches a sufficient dispersion, a sub-organization that succeeds in being organized, even if it is relatively small compared to the whole, becomes an epicenter of power that can control the whole organization. Therefore, it can turn itself into a new absolute authority through the mechanism of authoritarian-leap. In any case, the problem that the organization will encounter if it goes beyond the tolerance space at both thresholds is the absolute authority.

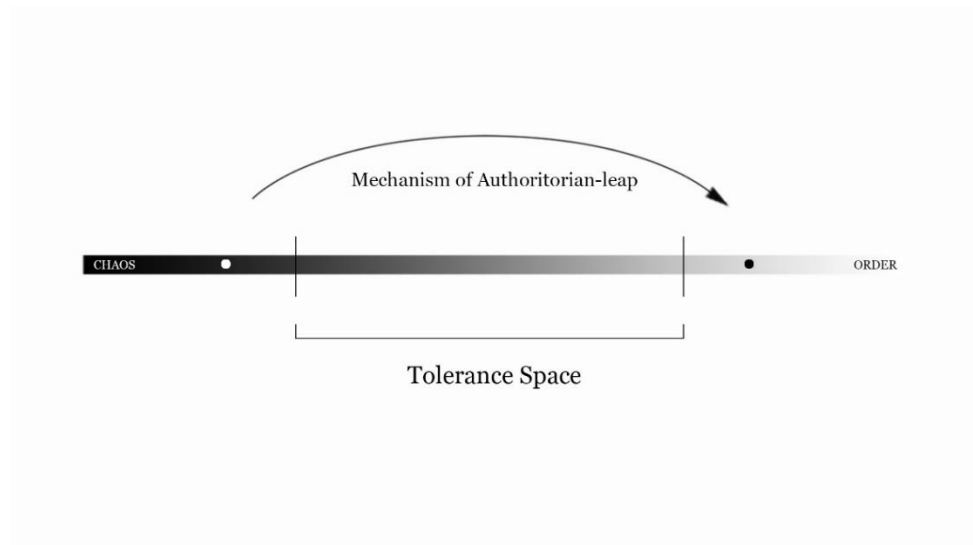


Figure 8. Graphical Depiction: Mechanism of authoritarian-leap. ¹¹¹

Segregation begins when the regulatory unit of the organization, the authority, sees itself not as a part of the organization, but the organization as its instrument. The result of segregation is nepotism, sectarianism, and othering i.e. *corruption*. As a result of these phenomena, the contribution-benefit balance of the organization begins to deteriorate and thus, the organization loses its causality; it has lost the quality of being just which was ideally established on it. If the subject of othering is aware of this condition, voluntary participation will no longer be the case. Thus, the subject will not contribute its true potential, if leaving the organization is not a reasonable option. The chain of clustering that starts with the determination of the authority causes the whole organization to lose its multiplicity and diversity. Eventually, this condition results in a decrease in the complexity of the organization.

¹¹¹ Graph produced by the author.

Through losing its complexity, the organization also loses its capacity of production, power, and potential; but continues to rigidify and anneal the organization with its norms. Here, although the authority continues to shape the organization within its norms and eliminates the multiplicity, it would not become inclusive beyond an illusion, even against the whole that is transformed according to the authority's will. A vicious cycle and the situation that makes the autocratic movement for the organization is broken with *the paradigm shift* and passes into anarchic movement. Renaissance and Era of Enlightenment can be given as examples of these historical breakpoints.

Børge Mogensen, an influential Danish designer and one of the creators of the concept 'Danish Modern' states "*My goal is to create items that serve people and give them the leading role, instead of forcing them to adapt to the items*".¹¹² An approach could also be visible on the free plan interpretation of this study of Le Corbusier's *Five Points of Architecture*. Mogensen allegorically describes, the clear-cut distinction between the goal of modernity and utopianism, while both are aiming for progression, the former is inclusive while the latter is exclusive. The condition of change could also be traceable in two contradicting works of Le Corbusier. One of his earlier works, *Maison Dom-Ino*, Le Corbusier, attempted to abstract the fundamental parameters of dwelling, aimed to define a pattern, the intention was to create a shell,¹¹³ not to dictate people how to live, but give them tools to devise their own. *Maison Dom-Ino* is an instance that describes a role of architecture within the scope of modernity: an inclusive proposal of progression, neither dictating by the order nor normalizing by the chaos. It describes a tolerance space within. On the other hand, in his latest work, *Plan Voisin* attempted to push a

¹¹² Børge Mogensen, n.d. Retrieved from (24 Oct 2020)
<https://www.fredericia.com/products/by-designer-b%C3%B8rge-mogensen/s%C3%B8rg-wood-base-1.aspx?PID=63&catid=6219>

¹¹³ Peter Eisenman, *Aspects of Modernism Maison Dom-Ino and the Self Referential Design*, 1979.

life for a social class which considered by Le Corbusier as ‘impure’. Plan Voisin is not concerned about the needs or expectations of its users, in other words, it was excluding its users from the subjective perfection, the modern utopia of Le Corbusier. However, since it is exclusive to the ‘modernist utopia’ of Le Corbusier, is not fitting in the context of modernity.

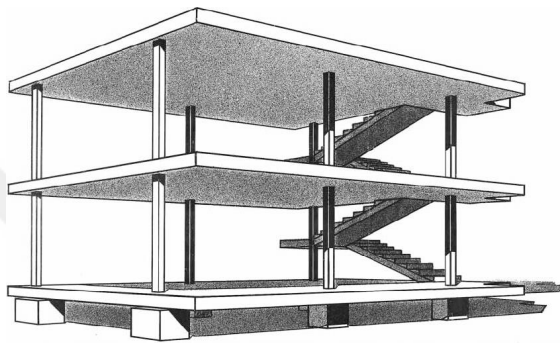


Figure 9. Maison Dom-Ino. 1915.¹¹⁴



Figure 10. Plan Voisin. 1925.¹¹⁵

In this context, a paradigm shift does not take a place as a new era as it was in the previous periods, but again in the modernist era itself. Modernism, which started as an attempt to break the absolute authority, forms a new absolute authority within itself. The conscious part of the absolute authority, capitalism, embraces the concept of progression and welfare which the outputs of the paradigm of modernity as if it were its product, and claimed to be justified by objectivity, the new epicenter of legitimacy.

¹¹⁴ Maison Dom-Ino. Edited by the author. Accessed (25 Oct 2020)
http://www.zeroundiciu.it/wp-content/uploads/2013/05/1914_Le-Corbusier_Maison-Dom-Ino.png

¹¹⁵ Plan Voisin. Edited by the author. Accessed (25 Oct 2020)
https://upload.wikimedia.org/wikipedia/commons/d/d8/Plan_Voisin_model.jpg

Generally, capitalism replaced the historical system of feudalism. Under feudalism, a nobility/lord class held lands from the Crown, with vassals as tenants of the land and peasants working the land of the nobles. These social positions were typically inherited and thus rigid, with scant opportunity for social mobility.¹¹⁶

One point to highlight here is that absolute authority exists within an organization that has gone beyond the tolerance space. As it is the main source phenomenon of othering, no absolute authority could sincerely bear the tolerance. As it grasps more power, it narrows the limits of tolerance which it maintains as an illusion. Here, the factor of othering might vary such as religion, culture, class, race, gender, etc. As a reflection of this condition, criticism also disappears gradually in a society or organization where absolute authority exists. In other words, modernism that is associated with capitalism contradicts with the principles of modernity. *“That is to say, we are witnessing the first —still utopian— attempt at capital’s complete domination over the universe of development.”*¹¹⁷ It is oppressive rather than liberal, extractive rather than fair, it is subjective rather than objective, interested in temporal rather than sustainable, it serves the private rather than public.

¹¹⁶ Matthew Pflaum. *The Limitations of Reductive Wealth Redistribution Strategies for Curtailing Inequality in the Era of Global Capitalism*, 2015: 388.

¹¹⁷ Manfredo Tafuri, *Architecture and Utopia: Design and Capitalist Development*, 1976: 151.

2.2.2.2 Problem of Autonomy

The second problem that modernity frequently faces is the problem of autonomy. The problem of autonomy is an isolated fraction of the problem of absolute authority within a discipline. Modernity prioritizes progression and public benefit. However, public benefit maximization does not always occur by doing what society directly demands, as it may appear as the first thing that comes to mind. Society may not have the ability to visualize or imaginative comprehension, which will provide development and increase the level of prosperity. Moreover, this kind of practice entails the risk of the rise of demagogues who are not telling the truth but can deceive people as indicated by Socrates.¹¹⁸ Hence it is immoral, this condition leads eventually to the problem of absolute authority as well. An example of the problem of autonomy can be exemplified within the law; what is right and fair is neither decided by the majority nor the will of an authority. The legitimacy of justice provided by law takes place through reasoning through logical constants.

Thus, public benefit is not possible when it is developed either by directly with the embraced opinion of the majority of the ideals of a single authority. This is another dichotomous extremity problem. Either absolute participation, which normalizes and accepts all opinions as equal, or acting only by the decision of an individual unit is incorrect and also detrimental to the whole organization. One of the suggestions that modernity offers for this problem is, gaining the discursive power of individuals through education and contribution to the domain. In other words, an individual's opinion is valued in proportion to his/her education and contribution to the related discipline. However, it is possible to describe conditions that determine the limits of the autonomy; first, even for the weakest individual, there should be

¹¹⁸ Lawrence Torcello, 'Does not tyranny spring from democracy?' How Plato's 380 BC philosophy is truer than ever today, 2019.

an open possibility of gaining power with effort and contribution. Secondly, the focal of power should not be isolated from being an object of criticism.

The profession of architecture is inherently a discipline where the problem of autonomy can be observed directly. The multiplicity and semantic differences of the word 'architect' can also be argued as the outcomes of this problem. Freedom in the production of the architect is restricted by parameters such as regulations, programs, client requests, etc. The range of motion determined by these parameters offered to the architect may vary to a great extent. Sometimes this area reveals extraordinary freedoms, in other cases, it restricts the degree of freedom of architects to a great extent.¹¹⁹ Besides the individual power of the architect, there is a direct projection of the architect currently holds within the global and local episteme. To what extent should the customer be involved in the work of the architect? Or, to what extent should the architect be free to produce architecture? These questions form the example of a dichotomous autonomy problem which again reveals a deadlock in both extremities.

Understanding is an evolving phenomenon by time, culture, and society. Additionally, the multidisciplinary nature of architecture makes the context of its meaning fragile. In different intervals of history, architecture is partially overlapped by the context of engineering, artistry, and craftsmanship. However, changes in the zones of overlapping, architecture kept its genuine intersection zone and defined itself as an autonomous discipline. Essentially, this differentiation in the meanings of 'architect' started with the 19. century modernism, before that architecture was the 'servant of authority'. Although they project an imagination

¹¹⁹ See. Kartal Urban Transformation Controversy & Yaşar Adnan Adanalı, n.d.: Blood Architecture.

over reality and are capable of glitter the imaginations of people. The architect was not there to design a 'new life' outside of what authority wanted them to create. The chain reaction of events started by the enlightenment and followed by the industrial revolution resulted in the emergence of a new transitional social class. The social structure changed by revolutions as aforementioned. The organization *demand*ed a built environment to serve life rather than *given* space.^{120 121} This could resemble the struggle of modernity with fate, and the will to earn. In the 19th century, the redefinition of architects started to be in service of stated demand in general. Architects first time became autonomous characters who have the power of creating a discourse of their own. The autonomy was there because architects were serving to 'public' rather than 'private' (or authority). The architect was not a servant of authority anymore but they became the *pioneers of the society*. As they were projecting a new, better life over the existent. Thus, one of the strongest resonances of modernity occurred in the discipline of architecture.

However, this autonomy also should be within the tolerance space between, absolute autonomy and normalized participation. Architects could not be autonomous as artists did as long as they serve the public rather than the private. But their autonomy is coming from as they serve the public. Nonetheless, for further discussions, it is beneficial to point out the differing point between artist and architect as Le Corbusier states:

¹²⁰ Jan Gehl, *Winning Back the Public Spaces*, 2004.

¹²¹ Bülent Batuman, "Everywhere Is Taksim": *The Politics of Public Space from Nation-Building to Neoliberal Islamism and Beyond*, 2015.

The engineer and the architect have to work with other people's money. They must consider their clients and, like politicians, they cannot be too far ahead of their moment. The artist, on the other hand particularly the painter, may generally find it nearly impossible to live; but if he can establish one of those curious compromises by means of which he can carry on a lean existence, he is at least free (at times) to project himself on paper or canvas without necessary reference to anything or anybody; and to make experiment and research for its own sake.¹²²

The architect distinguishes from the artist at the point that the former has only bounded freedom so the content of an architect's work is cannot be discussed independently from social context. As indicated above, it is impossible to say for an architect as an autonomous subject before 19th century because it was over-restricted by the authority, and stand outside of the tolerance of autonomy. As a result, architects were not there to propose a new idea of living but only for style or compositional works. As opposed to this condition, once neoliberal ideology rise, a new type of architect emerged. As a result of the evolving behavior of absolute authority, rather than restricting the range of motion of architects, capital gave excessive freedom to certain figures. The described group of *neoliberal figures* glorified and iconized through fame. Under these circumstances, limits of autonomy tolerance once again exceeded, not from the participation but absolution side.

What was the excess point of autonomy through the absolution side of autonomy? Architects with exceeding autonomy as *figures of influence* as they were to work on *prestigious projects* which require a high amount of investment, therefore lead

¹²² Le Corbusier, Toward a New Architecture 1923, 1931: 6.

by the expectation income by the capital. They were to serve the capital rather than the public interests. Thus, from the start, the concept of a neoliberal architect was an abuse of how an architect gained its autonomy. This type of production became a meta of capital as well as architects became idols. The neoliberal architecture was not primarily concerned with serving the public but is an object of self-representation. Thus, architects those accumulated excessive power through using the autonomy given to them by the public became artists, who have freedom, which their responsibility against the public is not a restriction but a choice. And the architecture was not architecture anymore but in closest analogy was a sculpture. Neoliberal architects were subjects of fictionalized perception. They have played a role in the realization of reform and reduction of the common understanding of architects back to, rather than an idea or abstract to figurative level, from *creators of life* to *makers of form without context*. As a result of changing episteme, people forget what architecture is. Therefore, we faced depression in the city through a lack of capabilities of design, demand, and cultivation of urban aesthetics, hygiene, welfare, life quality, adaptability, flexibility.

Many architects today use and understand context only in a limited fashion. Triggered by neoliberal globalization, architecture has increasingly become a commodity. This has led more than ever to the celebration of iconic buildings that mostly ignore their physical, social, and cultural contexts. The design of buildings detached from contextual concerns as freestanding objects has been misinterpreted as an autonomous design act, as in reality they may be considered surrendering to market forces.¹²³

¹²³ Esin Kömez Dağlıoğlu. Reclaiming Context: Between Autonomy and Engagement. 2020: 33.

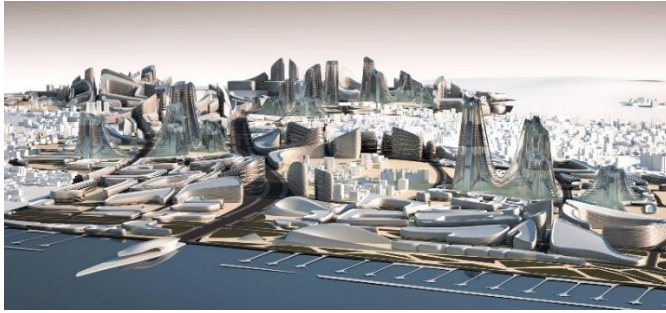


Figure 11. Zaha Hadid Architects proposal for Kartal-Istanbul. 2006.¹²⁴



Figure 12. Aerial drone shot of İstanbul-Kartal. 2019.¹²⁵

Eventually, while neoliberal architects reach excessive autonomy in their range of motion, the subject ‘architect’ was losing its autonomy. Yet, on the other hand, through fictionalized perception, many young architects are living by the dream of becoming a focal of power concerning architecture in an egotistical sense, however, what excessive autonomy did to architects is making them lose their intellectual character and autonomy and become technicians who lack the power of decision making. In other words, focal points of power in architecture resulted in architects to excluded from their product, the architecture.

The outcome of this phenomenon occurred in the episteme, as well as the built environment, architecture thought as something that existed in prestige buildings albeit used rarely, but not in the everyday life itself. As the architect was drawing palaces for the authority; architects once again became the *servant of authority*

¹²⁴ Zaha Hadid Architects proposal for Kartal. Architecture reduced to iconic plastic figures of sculpture rather than concerning about vast range of problematics of the district including the lack of green space. Accessed (25 Oct 2020) https://www.zaha-hadid.com/wp-content/uploads/2019/12/1245_karta_rend_06.jpg

¹²⁵ Aerial drone shot of Kartal. Revealing conditions of existent conditions of Kartal. Repetitive housing produced by contractors prioritizing profit rather than life rather than architects often lacks aesthetics and even basic necessities of resilience. See. Collapsing Building in Kartal on 6 Feb 2019. Accessed (25 Oct 2020) https://foto.sondakika.com/haber/2019/02/06/son-dakika-istanbul-valisi-yerlikaya-kartal-11716989_2991_m.jpg

rather than *pioneers of society*. The problem of autonomy is a fraction of the problem of absolute authority. Just as with absolute authority, the dichotomous extremity of autonomy can be considered problematic and causes problems when it goes beyond the tolerance space.

2.2.2.3 The Problem of Repetition (Regression | Deprogression)

The last problem that the paradigm of modernity discusses in this work is the problem of repetition or depression. Modernity strives for creating a more ideal existence by eliminating the cruelties within existence. The paradigm of modernity has partially achieved this condition in certain periods of history, but the state of modernity is fragile. In the consideration of modernity within the scale of dichotomous extremities, exceeding the limit points of tolerance space on either chaos or order, eliminated cruelties of existence will re-appear. This state of returning from ideal to primordial state of existence can be expressed as regression. The paradigm of modernity is not just aiming to establish a frozen better version of reality but being a progressive change itself. It is to discover a new dimension in each step and to see new horizons with progress and a new level of consciousness. However, this progress should not be perceived as singular as occurred in the case of regression.

Hence, one of the foremost inputs of progression appears as multiplicity. The opposite of progression, that is, the regression movement takes place linearly as it means to transform into a state that existed before. Perhaps the difference that regression is linear creates the perception that its opposite is linear as well, so the cognitive perception of the concept of progress is grasped as linear. However, contrast itself can be shown in multi-dimensionality.

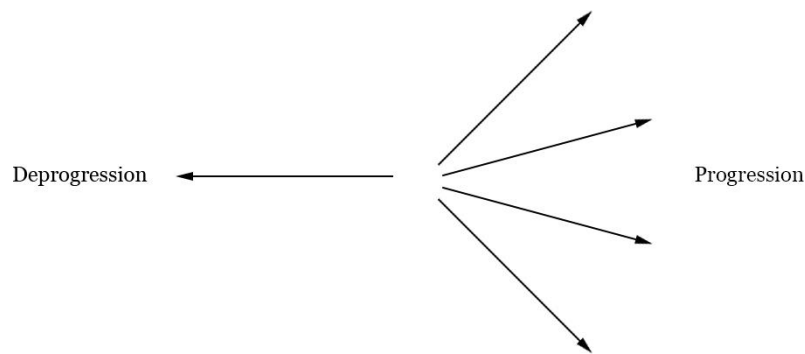


Figure 13. Graphical Depiction: Depression and progression.¹²⁶

The problem of absolute authority could be an instance of the problem of regression. This condition could be rendered within the abstract scale, the organization promises to overcome cruel realities. To establish the non-existent justice, and to elevate the earned over innate. However, when the unit of organization that is supposed to establish and accelerate the progression begins to act as a single cell and isolate itself from the organization, it becomes an absolute authority. Albeit different from the strongest as a figure, the absolute authority becomes *strong* that acts arbitrarily in nature, justice becomes a value of illusion, and the innate values dominate the earned. In other words, the absolute authority in an organization means a return to the cruelties of existence.

The movement of oscillation, in the process of respective historical periods after the birth of Christianity, could also represent the second example of the problem of repetition of modernity. The last example of regression that this study will give is the social problems experienced after the neoliberal economic model was discursively accepted by society. One of the main causes of the problem of regression might be death, which is the cruelty of reality that we do not have the

¹²⁶ Graph produced by the author.

power to change. People and generations are temporal. From the suffering to the gains, the development of humanity is only as far as passed on to the next generation. The verbal or textual transmission of this transmission is insufficient without internalization.

This condition could be concretized by an analogy of the library as a repository. It is not important whether a book exists in a library as long as no person is yielding its knowledge who is capable to revitalize it in praxis. Or, a slave, who fought for his/her freedom, obviously comprehends what it means to be free, however, his/her children who are born free might not truly comprehend the absence of such an abstract concept. No matter how great suffering resulted to born of modernity, as long as its values are not truly comprehended, they will fade away. Until now, the tool that has been found by the paradigm of modernity to establish, the perpetuity of earned state of progression in education. However, it could only function as long as it could host criticism, be distinct from indoctrination; just like the legitimacy of modernity against religion. The organization sets its reasoning with tolerance space that is set the limits in-between chaos and order through the paradigm of modernity. Eventually, three concepts become for society, to describe tolerance space and overcome problems of modernity: education for criticism, law for justice and art and science for the progression.

CHAPTER 3

PROJECTIONS OF TOLERANCE SPACE

This chapter attempts to superimpose the tolerance on space through the domain of architecture, *the city*, and its subject, *the society*. There are many cities in the world produced with different theoretical frameworks; some of them have features that mark them as cities that people want to live in and that make their users satisfied with their needs, while many others, unfortunately, are congested and failing to provide a certain quality of life and opportunities for its citizens. Although these factors are regarded as subjective to some extent, could it be possible to determine the objective qualities which mark cities better for society?

3.1 Open Society

It is suggested that a better city could be achieved by reaching a higher level of *regulated organizational complexity*. And, the main parameter here, which affects organizational complexity is *diversity*. Society as an organization could be differentiated on the method of how it is dealing with *the other*. The organization is regarded as a cooperative game model. The core unit of the organization is the individual. The organization might or might not consist of sub-organizations. When the organization is beyond a certain threshold in magnitude, it inevitably consists of a set of sub-organizations as well. Everyone within the society is part of a superset organization and a group of sub-organizations that may or might not be related to each other.

Ferdinand Tönnies¹²⁷ points out the dichotomous but distinct concepts between the superset and subset of organizations. The superset of the organization model could be named society, whereas the sub-organizations are communities. The discrimination limit of society and community is that other members are often familiar or known to the individual in communities, whereas, in society, it is not possible to familiarize all of the members. A family, a class, group of friends, clubs, etc. could represent examples of communities. Students, academics, and officials of a university, people of a city, a nation might represent examples of societies. Therefore, the individual is part of society as well as part of communities. In this study, the main parameter contributing to the power of the society is regarded as complexity, the diversity that an organization contains and regulates. While in communities, it is possible to recognize each member, society is of course a more abstract concept to fit in individual perception. Thus, society in a way represents a cooperative body without the necessity of direct familiarity, i.e., organization of the different.

¹²⁷ Ferdinand Tönnies, *Community and Civil Society [Gemeinschaft und Gesellschaft]*: 227-239.

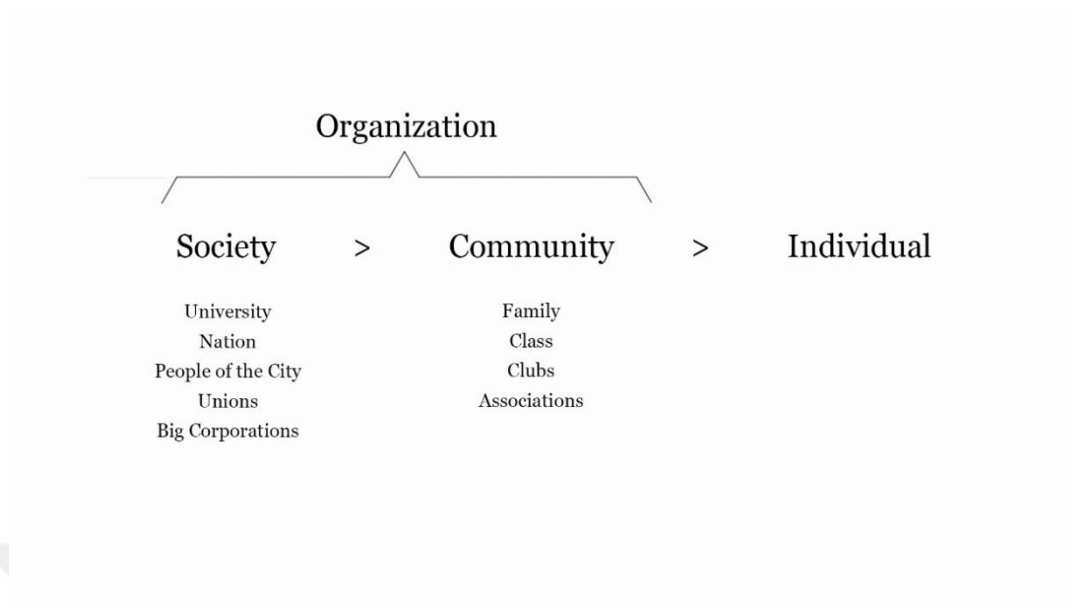


Figure 14. Graphical Depiction: Categories of human organizations.¹²⁸

In the universe of possible interactions between society and the other, society can reject, accept, or conditionally accept the newcomers or *the other*. The societies' reaction against new determines its state of openness. The oppositions of rejection and unconditional acceptance are regarded as *extremities of tolerance* in this work; through rejection, society can not maintain complexity, it can not evolve or progress. It becomes a closed society or *a tribe*. The major problem about closed society is being in a frozen state, or in other words, being closed to change. Often shaped by dogmatic rules of *absolute authority*, a closed society does not accept *the other*. As a result of the condition, the interaction between a closed society and any other society could either reject interaction or attempt to exploit the other. Condition of closed society could be described as *prioritization of belonging over objectivity*. Since it rejects to accept or blend, the closed society does not imply a good example of a *progressive society*.

¹²⁸ Graph produced by the author.

On the other hand, due to its closed structure, and rejection against differences (parameter of othering might vary as religion, language, class, ethnicity, etc.), a closed society cannot maintain organizational complexity which refers to a level of branching and specification in tasks, level of productivity, adaptability, and creative capacity of an organization. A closed society, as a result of being closed to change, cannot propose justice for the new contributors. Since they lack the fundamental necessity of organization they cannot maintain or enhance the organizational complexity. Another extreme, the unconditional acceptance may result in, the shift of regulations for the previous contributors. A closed society within the habitat of greater society could use organizational powers as unitary beings against individual contributors. As a result of this, a closed society either attempts to eliminate the other according to its discrimination rules or exploits the other i.e. proposes unfair conditions while allowing them within the society. In another case, the acceptance is just merely reflecting an illusion or closed society is already controlling the greater society. Pier Vittorio Aureli¹²⁹ illustrates this condition by the example of the Roman Empire in which, society accepts them through an unfair state of cooperation or *exploitation of units by the organization* model. The unconditional acceptance eventually, results in a closed society taking over the control of the society. In either case, the organization loses *the justice* that is its primordial reason. In the previous chapter, this condition is discussed as the phenomenon of the *authoritarian leap*. Thus, neither rejection nor unconditional acceptance contributes in terms of increasing a society's organizational complexity. Thus, as an example, street gangs, religious cults, mafia, bourgeoisie, lobbying, any type of sub-organization which does not promise justice and reasoning in their actions could be regarded as a closed society.

¹²⁹ Pier Vittorio Aureli, 2011: 5; 19-23; 27; 42-45.

The third possibility that this study suggests is *conditional acceptance*. Conditional acceptance is a gradient parameter that may vary to a great extent. What should be the limits of society's limits of porosity? If the conditions of acceptance would require trimming off innocuous subjectivities, then conditional acceptance would also not help in progressing the complexity of the organization either. Regulation rules for the open society could not be based on kinship, culture, habits, traditions, or stories but rules of each bring their reasoning and logic and if the context of the rules is changing over time, rules should also be able to change according to conditions. Karl Popper describes the open society as:

It is the longing of uncounted unknown men to free themselves and their minds from the tutelage of authority and prejudice. They attempt to build up an open society that rejects the absolute authority of the merely established and the merely traditional while trying to preserve, to develop, and to establish traditions, old or new, that measure up to their standards of freedom, of humaneness, and rational criticism.¹³⁰

In other words, what separates an open society from a closed society is the former based its regulation rules on life and reasoning. It is open for extension. The reasoning is open society paralleled with the conceptualization of what makes humans over-nature, as they stand against their instincts. An attempt to establish an ideal of justice which is a non-existent condition in nature, an imaginary system that has real outputs, and everyone will benefit as much as possible but through a balanced mix of communication, cooperation, and non-destructive competition. Upon this classification, this study suggests in the effort of humanity to develop and reach a more just and prosperous civilization for all, could be existed through

¹³⁰ Karl Raimund Popper, 1945, 2019: preface xi.

evolving concept of an open society through context and rationality. However, such structure stands fragile against extreme due to the mechanism of *authoritarian leap* i.e., the phenomenon of a sub-organization unfairly taking control of the larger organization of which it is a part. One of the obstacles in front of the open society is the necessity to change and rectify the instinctive behaviors such as addiction to power, worship to power, and condition of selfishness, which were once a survival advantage. As a result of this behavioral condition, closed societies exist, and stand against a threat to the idea of the open society.

Therefore, the concept of *openness* should not indicate unconditional acceptance. Open society could be described within the limits of tolerance space which its limits constantly inquired and identified upon rationality and healthy communication.¹³¹ Thus, living under the dogmatic rules of absolute authority even if it satisfies the huge portion of society, could not be justified. The rule of closed society represents the subjective ideal, a utopia. As a result of this, Popper¹³² criticizes utopias as they are becoming ideals of subjects, or products of closed societies. The open society is a societal contract in which, open to progression and change, the regulation rules of the society are shaped with rationality that commits to protect in a way that the rules of any kind of closed society cannot interfere with freedom and justice, and where the principle of earned over innate is prioritized.

3.2 Open City

The city, due to its inevitable magnitude, consists of people who do not know each other. Therefore, a city is a product of, and for society. As a result of this, the merits of the city could be articulated through the type of society it regulates and

¹³¹ Jürgen Habermas, 1992, *Postmetaphysical Thinking : Philosophical Essays Studies in Contemporary German Social Thought*: 127-132.

¹³² Karl Raimund Popper, 1945, 2019: 153.

serves. This study attempts to justify the city that is built through the policies aligned with the idea of open society as already drawn conceptually in the previous section. To inspect the city from the perspective of society, to be able to form an open society, two qualities should be ensured; these are justice and freedom. These qualities are prerequisites of creating the environment to establish a higher level of organizational complexity which is bonded to diversity. And, freedom and justice are not solely enough to invite diversity. Nevertheless inevitably, society is a form of organization. The rationality of an organization is based on a fair contribution-benefit (as argued by the context of game theory as Nash Equilibrium). As a result of this, to achieve diversity, society is expected to propose a better ideal than the existent. This condition as argued could be named as *the progression*. Thus, this study states that the city should propose freedom, justice, and progression as essential qualities to host an open society as well as modernity. City as an altered environment is a formal object of society. However, how could concepts of freedom, justice, and progression be represented as spatial qualities?

Different scholars articulate this discussion by using similar concepts: Henri Lefebvre articulates the contradictory condition of the city upon his terminology and his famous conceptual triad. Lefebvre describes three dimensions of space.¹³³ Those are the representation of space (conceived), representational space (perceived), and spatial practice (lived); continue to identify the possible differences between the triad because of expectations of what he describes as *the spatial circuit of capital*: between people, the users, and those who minority of power holders which invested in space.¹³⁴ Those tensions and expectations result to fictionalize a perception of space. In another sense, it shows the templates of space production which promise development, freedom, and justice, but in fact, will not

¹³³ Henri Lefebvre, *The Production of Space*, 1974, 1991: 38-39.

¹³⁴ Henri Lefebvre, 1974, 1991: 85-88.

be able to realize it. As the difference between the desired, designed, and implemented spaces widen, the space begins to lose its aesthetics, concepts, and rationality. Congruently, Richard Sennett seeks a discursive ground for the concept of *an open city* based on the problems in contemporary cities. He draws attention to the distinction between the idealization and the reality of contemporary cities. Some of these examples are *access, inequality, segregation, dysfunctional suburbs, traffic, deprivation, urban space designed for vehicles in priority for the sake of logistic utility rather than people, over-bloated cities, pollution, congestion, and depression*. The origin of the problem according to Sennett is political, because the city that supposedly serves the society and public, is shaped upon decisions rather than a prioritization of private interests. Therefore, it suffers from abnormalities in the prioritization of the benefit of a group (closed society) rather than a whole. It occurs in urban spaces as segregation, the break of permeability, and access inequality.

Cities fail on all these counts due to government policies, irreparable social ills, and economic forces beyond local control. The city is not its own master. Still, something has gone wrong, radically wrong, in our conception of what a city itself should be. Perhaps those nice words -- clean, safe, efficient, dynamic -- are not enough in themselves to confront critically our masters.¹³⁵

There stands a serious contradiction, a product of society supposed to make its life easier and prosperous unlikely to the existent condition of the city. The social congestion created in cities is high that our cities become the object that makes life unbearable, let alone offering this wellbeing.

¹³⁵ Richard Sennett, 2014: 1.

... we see the right to the city falling into the hands of private or quasi-private interests. In New York City, for example, we have a billionaire mayor, M Michael Bloomberg, who is reshaping the city along lines favorable to the developers, to Wall Street and transnational capitalist class elements, while continuing to sell the city as an optimal location for high-value businesses and a fantastic destination for tourists, thus turning Manhattan in effect into one vast gated community for the rich.¹³⁶

Sennett argues that it is possible to make a free, just city possible through the concept of open society if the policies convert to serve the society. He articulates upon the problems of contemporary city through the open city. Next, Pier Vittorio Aureli examines the city-society relationship. Aureli theorizes the differences between Greek and Roman City and criticizes the parallel cities of the Roman Policy and contemporary cities.¹³⁷ Aureli examples the strict distinction between public and private space in Greek cities. In the Greek City, there exists a distinctive space for public decision-making. The Agora¹³⁸ even if not ideal a place that is to regulate and allow, the coexistence of differences. Agora is a place of communication, an interface for individuals to demand and optimize just solutions for the contributors of society. In another sense, it is a space to establish Habermas' idea of *communicative rationality*. He continues with the disappearance of Agora in the Roman city, and how the expansion policy of the Roman Empire affected the roman city. The idea of acceptance in Rome turns into the exploitation of society for a privileged group. This pattern also exemplifies that despotic governance comes after populist leaders. Aureli criticizes the expansionist urbanism policies

¹³⁶ David Harvey, *Rebel Cities*, 2012: 23.

¹³⁷ Pier Vittorio Aureli, 2011: 5.

¹³⁸ Pier Vittorio Aureli, 2011: 4.

and the modern city based on the parallels they show with the contradictions of the Roman city, which used the Greek city as a prototype and lost the Agora:

Unlike the Greek *nomos*, which was a predetermined form that framed the unfolding of political life, the Roman law was a political instrument at the service of Rome's expansionist logic, through which the Romans could force alien populations to be part of an ever-inclusive alliance for the sake of Rome itself.¹³⁹

A similar problem, as mentioned in Aureli's work, was touched upon by two architects through some suggested solutions for the adaptability condition of the city. Oswald Mathias Ungers and Rem Koolhaas both used the analogy of the archipelago and presented a systematic suggestion that could produce solutions to the aforementioned problems of the city.

¹³⁹ Pier Vittorio Aureli, 2011: 5.

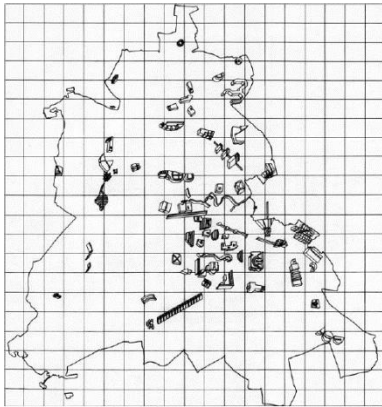


Figure 15. The City within the City—Berlin as a Green Archipelago, 1977.¹⁴⁰

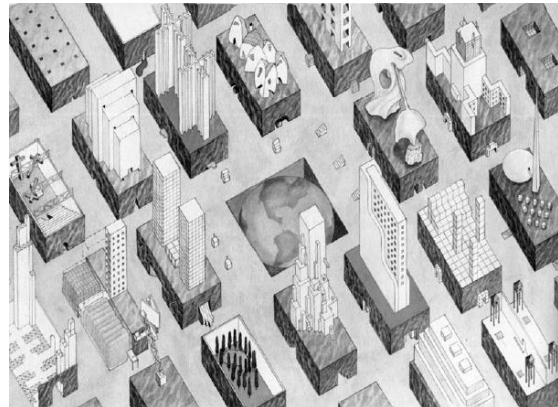


Figure 16. Rem Koolhaas, The City of the Captive Globe, 1972.¹⁴¹

Along with Koolhaas and Ungers, Aureli also uses the formal analogy of Archipelago to build his framework on his theoretical work *The Possibility of An Absolute Architecture*:

I will illustrate a counterproject for the city—the archipelago—by referring to a specific architectural form that is a counter form within and against the totality of urbanization. This project will lead to what I see as a preliminary introduction for a definition of architecture itself, or what I define as the possibility of absolute architecture.¹⁴²

Why did they use the analogy of archipelago? What is so special about this form? This idea could be illustrated upon Karl Poppers' definition of democracy as Karl

¹⁴⁰ As cited in Pier Vittorio Aureli, 2011: 179.

¹⁴¹ As cited in Pier Vittorio Aureli, 2011: 22.

¹⁴² Pier Vittorio Aureli, 2011: 2.

Popper describes democracy as the prevention of power to be accumulated in a single hand:¹⁴³

Democracy cannot be fully characterized as the rule of the majority, although the institution of general elections is most important. For a majority might rule in a tyrannical way. (The majority of those who are less than 6 ft. high may decide that the minority of those over 6ft. shall pay all taxes.) In a democracy, the powers of the rulers must be limited; and the criterion of a democracy is this: In a democracy, the rulers—that is to say, the government—can be dismissed by the ruled without bloodshed. Thus if the men in power do not safeguard those institutions which secure to the minority the possibility of working for a peaceful change, then their rule is tyranny.¹⁴⁴

An archipelago is a set of islands; and, as a group, they represent a whole. However, each island also bears its autonomous character. None of the islands could be a focal point; they do not overwhelm others if there is no significant scale difference among themselves, each island stands with its unique characteristic limits. New islands could be added or removed under extraordinary conditions. The phenomenon of accumulation of power in a single hand is an extremity. Additionally, normalizing everything on a uniform distribution scale while disregarding every other parameter represents another extremity. As a concretizing example, it is possible to ask, does the agglomeration of endless houses represents a city? On this problem once again it is possible to use the model of tolerance space

¹⁴³ Karl Popper, 1974, Karl Popper Clips (1974) [Video File], Accessed (12 Feb 2021) <https://youtu.be/sLDpj8dx0UU?t=192>

¹⁴⁴ Karl R. Popper, 1945, 2019: 368.

on how a city's formal distribution should be in terms of distribution of significance?

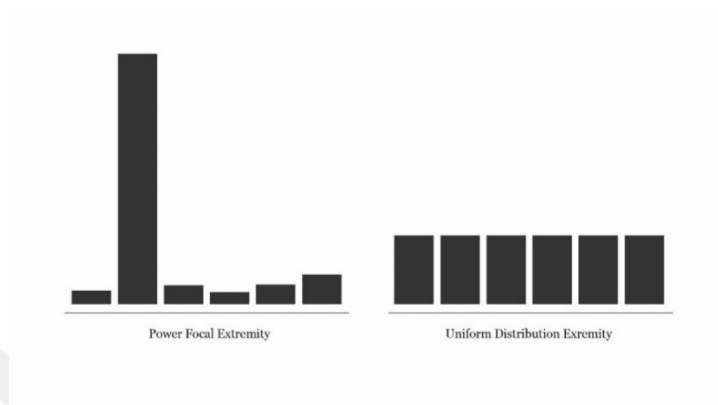


Figure 17. Graphical Depiction: Distribution extremities.¹⁴⁵

An exemplary model to this, in the idea of the Koolhaas' City of Captive Globe, in the endlessly expanding logistic grid, Koolhaas plants building pads each of which could bear a different function. On the analogy of archipelago, logistic grid (sea) and building pads (islands) could answer the necessity of adaptability on the city. However, while offering a solution for the accumulation of power focal, Koolhaas' archipelago is suffering from other extremes which is normalizing everything in the grid. Upon this point Aureli criticizes Koolhaas:

In Koolhaas's Manhattan archipelago, the difference is reinforced by the total schism between the image of architecture—where anything goes—and the functioning of the island, which ultimately is dictated by the grid and the elevator, and which indeed “lobotomizes” the forms of the buildings.

¹⁴⁵ Graph produced by the author.

Yet the space of the building in the Koolhaas's City of the Captive Globe is not that of an island, where the relationship between the inside (terra firma) and outside (the sea) is vital and open to different approaches but is more like an enclave, where the enclave's strict dependence on the regime of accessibility and circulation is compensated for by the overdose of ideology and iconography provided by the landmark.¹⁴⁶

Unlike the example of Koolhaas, According to Aureli, the archipelago has greater consistency in the example of Unger's: as it can be described through Karl Popper's concept of democracy. Ungers proposes islands as differentiated settlements and sea as green infrastructure. If an island starts to shrink, in terms of population it is devoured by nature and green belt again without leaving tracks. Thereby it does provide a mechanism to shrink as well as the growth. To some extent, it is adaptive to change. Unity of the islands provides the chance to encounter and communicate by the words of Ungers, it provides "*coincidence of oppositions*".

Superimposing the city on the model of the archipelago it is possible to see a fragmentation of focal points, naturally, one does not see the city as an integral organism. This condition provides a distribution of significance levels rather than having a single center or formal authoritarian silhouette, additionally, designing fragments rather than total design is providing a progressive statement, i.e. by Poppers' definition of progression and control mechanism for *piecemeal social engineering*. Aureli considers the attempt of reconstructing the Agora as a futile effort in the contemporary city. One and the most evident example, it is not possible due to the current magnitudes. However, it should not mean to disregard the ideas behind why the Greeks were required to build the Agora. An interface

¹⁴⁶ Pier Vittorio Aureli, 2011: 25.

that appears as a necessity for coexistence. Interface refers to a communication space to regulate differences and establish fairness and public interest.

Ildefons Cerda was the first one who systematically organizes the complex industrial city.¹⁴⁷ Urbanization draws the primary parameters to utilize the city better, as Sennet also pointed out, clean, safe, efficient, dynamic, and transmissive could be given as introductory parameters to the city. However, the city as a product of society should not be articulated out of the social context. The problems that the scholars are describing and proposing solutions are based on the theorization of the society and its formal object. There becomes other parameters of justice, freedom, and progression. And on the question of how these merits going to be implemented in the city, this study argues that via the idea of open society and open city. In the following section, the spatial qualities of freedom, justice, and progress to establish tolerance space within the city will be illustrated.

3.3 Dimensions of Tolerance Space

In the previous sections, it is attempted to propose reasoning for an open society and why the city should be designed in a way to be able to capable to host the open society. In this section, three main qualities of the open city will be scrutinized on how they could be represented as spatial qualities.

3.3.1 Justice

This part of the study articulates how the concept of justice, which is an abstract concept, can be portrayed through spatially perceptible parameters. This and the following sections do not aim at understanding how to achieve qualities, but rather

¹⁴⁷ Ildefons Cerdà, 1837, 2018.

attempt to describe what are those qualities in the spatial sense? Thus, this section attempts to identify a spatial requirement through the problems encountered in the absence of the concept of justice in the city.

3.3.1.1 Accessibility

To call a city just, the opportunities of the city must be accessible to its users equally. The city's logistic infrastructure, green areas, entertainment, culture, health, and education opportunities should be open and reachable to all citizens and distributed uniformly as much as possible. The urban planning principles, which were defined for the first time by Ildefons Cerda were seeking solutions to the uniform distribution of the logistics and hygiene standards for the city. Along with the discourse of capitalist rationality, the concept of 'urbanism' was deprived of the ability to make decisions about the ideal and was seen as a tool of solution making, regardless of the taken decisions. When the city is constructed on a concept of centrism, an inevitable formal hierarchy emerges as it moves away from the center. If the city does not limit itself through acceptability, there occurs a problem of infinity.

A lot has changed since the cities demanded by the Industrial Revolution: A new urban pattern, which turned into megapolises after the metropolis, unmanageable and therefore uncontrollable, knitted by scaleless spatial masses, together with urban practices they constitute the general situation of today.¹⁴⁸

¹⁴⁸ Güven Arif Sargın. Capitalist Urbanization and the Climate Crisis are Class Issues [Kapitalist Kentleşme ve İklim Krizi bir Sınıf Meselesidir...]. 2021.

The ever-expanding city produces the suburbs purgatory spaces between rural settlement and the city. Suburbs are the annex to the city but cannot become a part of it. Problems belonging to suburbs start with lack of public transport, time cost, and planning necessary to access services of the city. As they are mostly build-up for private transportation, suburbs suffer from car-dominated areas, poor public and social infrastructure. Due to the restricted mobility, residents of the suburbs are often trapped in their accommodations; as city dwellers, they are unable to benefit from the opportunities of the city. As a result of lack of communication suburbs often becomes places of segregation. There appears suburbs are often associated with classes sometimes they become even more chaotic through uncontrolled drug and crime traffic. Other common problems are visible due to repetitive production patterns of the suburbs those could be named respectively *depolarization* and *disorientation*. However, these conditions are not going to be articulated in this chapter as they are considered to be out of context. As a result of the segregation, the city loses its quality of being fair in terms of accessibility.

3.3.1.2 Permeability

The second dimension of the spatial representation of justice is permeability. Permeability is a social quality as well as has its spatial projection. Although restricted places are inevitable in the city, the proportion of restricted access places might indicate an expression of permeability within the city. On the other hand, even if the place is not restricted in terms of access, individuals might perceive themselves as alienated from urban space. If one feels excluded or the access is subject to certain conditions, most of the time this is an indication of the dominance that a closed society has established over urban space. Urban space is no longer a structure that serves a *public* of the open society but rather a *territory*.

As an example, shopping malls and gated communities are selectively permeable spaces that operate under the illusion of open space, depending on class

segregation. The need to create the illusion of open space as an effort to promise the freedom that open society can promise. Segregation of American suburbs based on class, race, or religion may also be given. In this study, permeability as spatial quality meant to be, *the urban space belongs to everyone and nobody at the same time*. Although it can temporarily evolve into different forms, when the urban space permanently belongs to a closed group, it loses its capacity to serve the open society.

3.3.2 Freedom

Justice is an essential quality that keeps the rational state of an organization. Therefore, as a formal product of an organization, the city should bear this quality. Justice is not adequate by itself to maintain and increase the organizational complexity. The organization is carried out to achieve a higher fraction of power. And power is *the capacity to fulfill the wishes of the one*. As a result, power is merely an interface unit for one to have greater freedom. Thus, upon the rationalization of organization, the city should also propose freedom. Research questions then repeat the following subject; how can freedom be reflected as spatial quality?

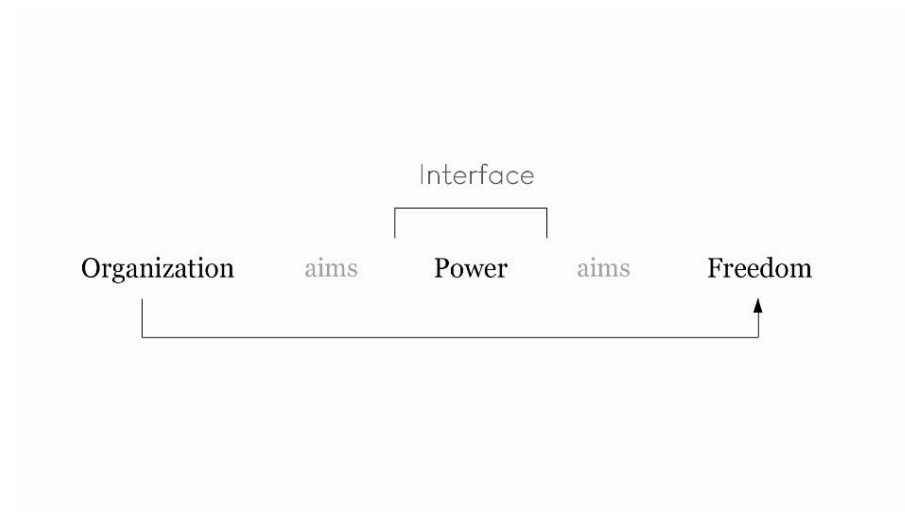


Figure 18. Graphical Depiction: Power as an interface between organization and freedom.¹⁴⁹

According to the Cambridge Dictionary, freedom is “*the condition or right of being able or allowed to do, say, think, etc. whatever you want to, without being controlled or limited.*”¹⁵⁰ Although this definition made independently of the context seems correct, the concept of freedom could be articulated as problematic within the tolerance space. On the preliminary interpretation of this study, from the abstract to the concrete, freedom is regarded as *the individual's ability to get rid of restrictions, make individual decisions and control his/her own life*. However, this interpretation has also shortcomings. While the concept of freedom is existent as a result of interaction, definitions are made by ignoring the interaction. For instance, harming someone can be classified within the limits of freedom, definition without context albeit it seems to be true, should not be articulated unbounded from interaction, or context as unlimited freedom is only leading to the condition which was previously regarded as the chaos of nature.

¹⁴⁹ Graph produced by the author.

¹⁵⁰ Freedom (n.d.). In Cambridge Dictionary. Accessed (6 Nov 2021)
<https://dictionary.cambridge.org/dictionary/english/freedom>

Freedom is a contextual concept that can exist through the result of direct interaction. Because the concepts that make up the restrictions mentioned here are always environmental or exist as a result of social interaction. From the individual point of view, If the extension of individual freedom restricts the freedom of another individual, this phenomenon contradicts the reasoning of the organization. It violates the ideal of justice. Thus, the concept of freedom should be considered within the context of justice. Therefore, extending the limits of freedom should not be considered as an individual thing but an equation on social interaction. Eventually, individual freedom could be extended by limiting it on individual sense and context.

3.3.2.1 Anonymity

In the social context, limits of freedom should be extended within the limits of justice. In society, the greatest danger limiting the freedom of society, which is a complex sphere of interaction, can be interpreted as a closed society, that is, the society has its own culture or belief values, imposing its lifestyle on the whole society. To prevent this condition i.e., *peer pressure*, *contribution-benefit inequity*, etc. the social sphere must not be dominated by any sub-groups within the society. Anonymity is a method that has long been used in democratic elections to liberate the individual from the dominant view. When we try to apply the concept of anonymity to open social spaces, the situation we are trying to protect is the closed society that is dominant and strong enough that can ignore all the remaining multiplicity. As indicated in the democracy definition of Popper and the archipelago analogy of Aureli, public open space should be unoccupiable by the dominant view of the society. There becomes two types of necessity, magnitude, and multiplicity.

If the organization is not of a certain size, it could not sustain social anonymity. This problem could refer to the difference between society and the community. Thus, one of the aspects of open public space appears as it is space that to encounter with the other, unfamiliar or unknown. However, magnitude is not enough to provide anonymity alone. An example of this can be given as the pressure in Anatolian cities, where predominantly Muslim populations live, to restrict eating and drinking during Ramadan (the ninth month of the Islamic calendar) as a societal rule. Therefore, as a condition of describing freedom on space, public space should be able to create a conjuncture that cannot be invaded by the closed society, and the prerequisite of this condition is anonymity as a *place of encounter with a stranger*.

3.3.2.2 Opportunities of Engagement

The second situation of reflecting the concept of freedom in the space is the interaction possibilities that arise as a result of the interaction with the stranger or anonymity. Richard Sennett examines these possibilities¹⁵¹ as *information exchange* and *confrontation*. Confrontation provides an opportunity and a rational basis to reach the *Shapley Value*.^{152 153} If the society or group is not capable of communicating on the rational interface, this will inevitably result in a conflict. However, the condition of civilization is that people who do not think the same can live together. While it provides the basis for information exchange progression, confrontation makes it possible to find a rational communication ground, *empathy*, and *non-violent possibilities of a solution*. The third important concept of interaction possibilities is the concept of *demand*. Demand is regarded as the

¹⁵¹ Richard Sennett, 2014: 2-10.

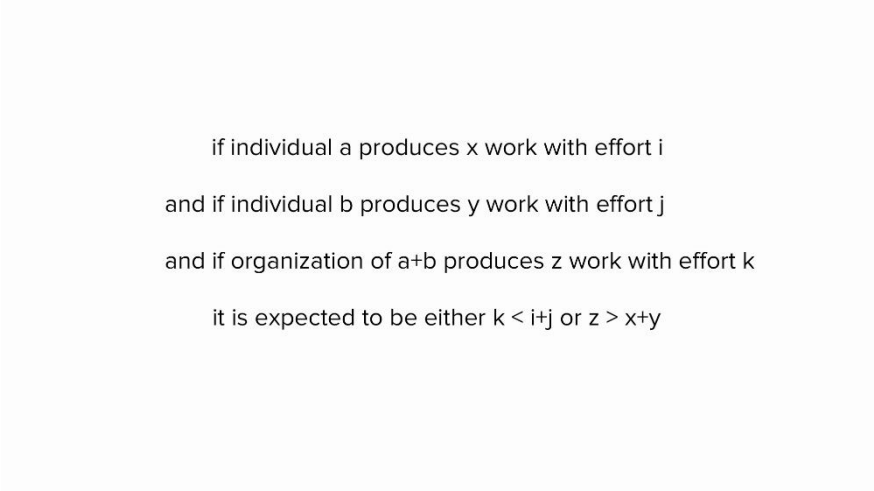
¹⁵² Shapley Value, In Sciencedirect, 2015, Accessed (6 Nov 2021)
<https://www.sciencedirect.com/topics/mathematics/shapley-value>

¹⁵³ Lloyd S. Shapley, Notes on the n-Person Game -- II: The Value of an n-Person Game, 1951.

epitome where freedom is reflected spatially. Because demand as a decision is a pure reflection of freedom and will. In other words, only the free could demand. On the other hand, from bottom to up, demand is an individual's search for justice in the rational dimension against the situation described as unjust, as a result of the confrontation. But the demand in civilization takes place peacefully.

3.3.3 Progression

Along with justice and freedom, the last pillar of creating an open city is considered as the concept of progression. The organization or cooperative game is a structure that is expected to offer mutual benefit. The organization must offer a fair contribution to individuals and vice versa. If we formulate this as the labor-production equation, the output of the organizational labor should expect to be greater.



if individual a produces x work with effort i
and if individual b produces y work with effort j
and if organization of a+b produces z work with effort k
it is expected to be either $k < i+j$ or $z > x+y$

Figure 19. Verbal Depiction: Presumed outcome of organizational effort.¹⁵⁴

¹⁵⁴ Graph produced by the author.

The progression emphasizes *a better, more ideal existence that does not exist in its natural state or current time*. Even if we cannot dream of the ideal, a search for it could be regarded as progression. However, seeking the steps of development in the existent conditions is a logical fallacy. For progression, it is necessary to correctly perceive the rules of existence and construct a new structure that can manipulate them. In other words, seeking improvement should not mean not looking the existent.

Since the development is not based on the existing, it is not a static concept. This might be the reason the progression of modernity is understood as a revolt against tradition. Tradition has become the direct target of the discourse of modernity, as it becomes frozen, thus abstracted from its reasoning, as a set of actions. One of the biggest problems in architecture and city planning is that the structure is not open to change and further development. The current practice of producing the built environment changes nature, on the assumption that is going to be used in the same function. Architecture supposedly proposes a better version of the existent; thus, supposedly what architects seek is progression. Nevertheless, as it suffered from stillness, Rem Koolhaas and Bernard Tschumi criticize the finiteness of the architectural program.

Koolhaas suggests the impossibility of definitely determining the needs in an architectural program. He proposes a conceptual solution, as he named *programmatic instability*.¹⁵⁵ Tschumi¹⁵⁶ argues the same problem from a different perspective. He criticizes ignoring the *event* in architecture as follows:

¹⁵⁵ Rem Koolhaas, *The Delirious New York: A Retroactive Manifesto for Manhattan*, 1978: 87.

¹⁵⁶ Bernard Tschumi, *Disjunctions*, 1987, Accessed (7 Nov 2021) <https://www.jstor.org/stable/1567111>.

Architecture, unfortunately, lies behind other disciplines, particularly art and political studies, in its investigations of the structuring of social space. It continues to describe that space as a given, a thing, that can be alternately served or serviced through specific programs, "functions." In consequence, it regards the social unproblematically, ignoring how the social is articulated or brought into being in and through a building. How programs dynamize space, either impeding or activating social processes, is rarely addressed, nor is how that space is constituted as a process. Fixing things - "architecture is an art of pinning things down," to quote the Times - is the unfortunate focus of architectural discourse.¹⁵⁷

According to Tschumi, the problem of the architectural program is its preventive condition that tries to describe social space as inanimate and dull without evolution.

3.3.3.1 Flexibility and Adaptability

Flexibility is the capacity of altering the function of space between the identified set of events. Flexibility is in a way manifestation or attempts to depict *change* as spatial quality. Beyond flexibility, there is adaptability which is the ability to be able to evolve for the change not via the discrete functions but something unknown. However, is it possible to create an architecture that will allow for change even if their future function is unknown? A rhetorical answer could be given upon the discipline of software architecture concept, *the polymorphism*.¹⁵⁸ The concept of adaptability is paralleled with the polymorphism paradigm in

¹⁵⁷ Bernard Tschumi, *Urban Pleasures and the Moral Good*, 1994: 10.

¹⁵⁸ Polymorphism, In Stackoverflow, 2009, Accessed (7 Nov 2021)
<https://stackoverflow.com/questions/1031273/what-is-polymorphism-what-is-it-for-and-how-is-it-used>

programming upon the same problem; although it represents a broader answer to questions, polymorphism seeks an answer for communicating with discrete or unknown types of objects. As an analogy, an electrical plug could be given. In the time, when a standard for an electrical plug has been set, it is unknown for designers to know what sort of electrical gadget is going to be used on the electrical plug. However, as long as they do match the same interface object (applicable plug) it does not necessary to be known.¹⁵⁹ An inquiry on this problem has been carried out by Le Corbusier as he prototyped via in Maison Do Mino (See Fig. 11). Aimed to extract basics of every housing architecture has, and rest to be shaped according to customization of its users, purified from the stylistic elements. Maison Do Mino consists of the abstraction of functions. For users to define the rests according to their expectations and needs. A place that belongs to no one at the same time lacking from any kind of function and perception of place. The place that is attempted to describe though tolerance space does not emphasize a place that does not serve anyone but can evolve according to conditions and society, and that can communicate with its users. The open society is the one open to progressive. Thus, an open society should be adaptive to be able to reach a better version of our understanding, civilization, and needs.

3.3.3.2 Multiplicity

The last fundamental property within the consideration limits of this study is progression as the spatial and social quality of progression is multiplicity. To articulate multiplicity, it is considered to be necessary to include the dichotomous pair of progression, the regression. Regression refers to a return to a less developed point or state. As it indicates from one point to another, regression often refers to a linear or one-directional movement. However, progression does not indicate

¹⁵⁹ The analogy used by Altan Koçyiğit in a lecture to describe polymorphism, January 2020.

linearity as regression does. The opposition between regression and progression is multidimensional. The reduction in the understanding of progression as linearity often considered being dull or autocratic. As one problem could have multiple solutions, it is possible to progress in multiple directions as long as they do not conflict with each other. Being open against the variety of solutions as well as the existence is a merit of progression.

3.4 Tolerance Space through Examples

In this study, the concept of tolerance space is articulated upon open public spaces. Before moving on to the case study, in this short section, an inquiry upon spatial expressions of the tolerance space in different dimensions is attempted to be articulated.

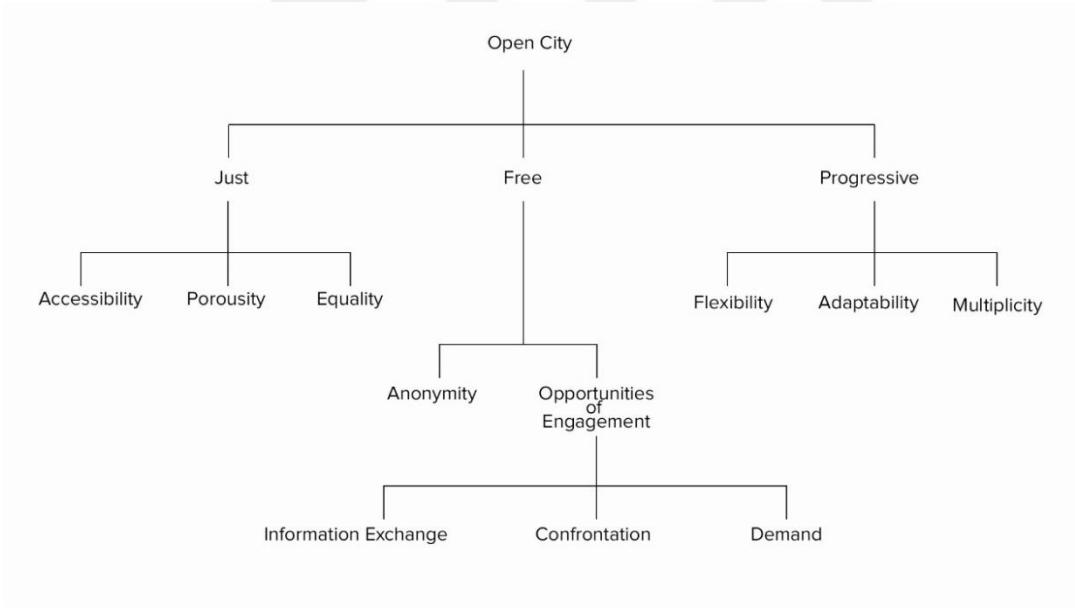


Figure 20. Categorization Tree: Merits of Open City.¹⁶⁰

¹⁶⁰ Graph produced by the author.

3.4.1 Tolerance Space in Binary Representation of Data

The first instance of tolerance space is considered as computer memories, which are used to store any kind of information through converting them to numeric binary representations through electron gates (transistors). The computer operates as an autonomous library that systematically records which information is kept where. In a conventional system, the computer uses two distinct types of memory. Hard drive, a permanent area where information can be kept, and RAM (Random Access Memory). The reason for this distinction is that the hard drive represents the permanent location and holds the final address of the information. RAM, on the other hand, is the place that belongs to the space that any program requests temporarily while the computer is running. Instead of rewriting a certain area of the disk each time and querying and changing the address, the computer requires an area that can be allocated (cached) to anything, anytime, and accessed quickly to use as a necessity of interaction. RAM is not a domain for a particular type of information. It is a space that belongs to everyone, can be used by everyone, but does not belong to anyone at the same time. In this understanding, RAM functions as an adaptive and flexible public space as a necessity for a computer needed, that does not belong to one so that different programs can communicate with each other at runtime. RAM reflects the quality of accessible, anonymous, unoccupiable, and adaptive space. Therefore, RAM is presented to be considered as a tolerance space in the virtual dimension.

3.4.2 Tolerance Space in Personal Space

The second example is a result of an inquiry of whether we can depict a tolerance space on an individual scale rather than public space. In the context of the individual scale, the tolerance space should be considered independently of the interaction properties of public space. Nevertheless, other features can still be articulated on an individual scope.

The American garage can be an example of this situation. The establishment of many worlds' well-known initiatives such as *Google* and *Apple* started in the garage.¹⁶¹ Is this a coincidence or does it have reason(s)? Different dimensions can be discussed, but this situation is attributed to a feature offered by the American garage which refers to it as a tolerance space. Housing produced for people has been produced to carry out the *vital* activities that are common to everyone in almost all conditions. Although each of the defined home spaces such as the bathroom, living room, toilet, and kitchen contains definitions of space that meet the needs, they are not very open to flexible in terms of variety or *unknown* usage. The concept of the garage, which does not exist in most countries and was born partly as a result of the high level of welfare, remains outside this condition. The garage shows itself as an *undefined adaptive space* that can respond to functions that did not exist before, with a sheltered area that offers a place that has no function other than parking a car.

It has a structure that can transform into a warehouse, workshop, or hobby room, depending on the need. Contrary to an empty room in the house, whose function is determined before being settled in the house, the American garage is an adaptive device that is not 'occupied' by a function, which is also tolerant of noise and does not disturb people outside, and at the same time has high accessibility due to some logistical (accessibility) advantages. Allows it the feature of being a tolerant place. Therefore, the American garage is considered to be a personal level tolerance space as indicated for RAM in a computer, although it is not predicted to be so. For this

¹⁶¹ Mary Meisenzahl, In diesen unscheinbaren Garagen wurden Amazon, Google, Apple und Co. gegründet. 2019, Accessed (7 Nov 2021)
<https://www.businessinsider.de/wirtschaft/in-diesen-unscheinbaren-garagen-wurden-amazon-google-apple-und-co-gegruendet/>

reason, it can devise new possibilities by evolving space into that previously non-existent.

One of the starting points of the flexible housing discourse and as a counter-example is the building stock in Turkey. Three-room houses designed for families with children constitute a large portion of the building stock in Turkey.

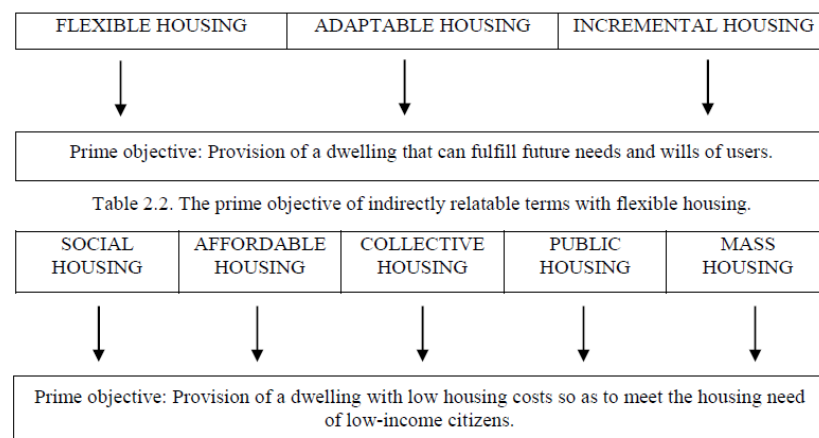


Figure 21. Categorization of Housing Discourses.¹⁶²

Although the demand for this house model is gradually decreasing, the construction industry continues to produce the same house model, partly with imposition and tradition. As a result, the pattern of production fails to answer the evolving society which is not entirely composed of families. Therefore, the houses that are supposed to be produced for the need of society, turn out to be a problem in congestion and dullness. And society is forced to enter the molds along with the production which is the result of private interest. E.g., shared housing, lack of privacy, peer pressure.

¹⁶² Mert Durmaz, Flexible housing in the 21st century: three contemporary case studies, 2019: 13.

3.4.3 Tolerance Space as Time

The third example of the tolerance space is again personal but considered to be a time-range instead of physical space. The Gap Year is a year-long break between secondary and higher education that is applied in some (often developed) countries. During gap year students often take a break from their studies and try out different things such as travel, exchange programs, volunteering, internships, learning crafts, etc. Although it is considered to be controversial, the reason for an application for the gap year is increasing degree of freedom for one extend their vision and experiences about life, to better know themselves, increase their individuality and allow them to think before making huge decisions about their life.¹⁶³ Although it seems like a waste of time to some parties, it aims at individual progression through increasing freedom. Thus, the gap year can be considered to be a tolerance space in human life.

To have a better understanding of a gap year two well-known cases can be scrutinized: The famous apple story of Isaac Newton and the Bridge of William Rowan Hamilton¹⁶⁴. These two people are great contributors to humanity. The common point between their stories, the epitome solution moment of their inventions or discoveries, is seen to be the irrelevant moment to their study.

¹⁶³ Gündüz Vassaf, Çivisi çıkmış bir dünyada yaşıyoruz - DW Türkçe [Video File], 2021, Accessed (28 Nov 2021) <https://youtu.be/ujfgSmFYuWM>

¹⁶⁴ 3Blue1Brown, Visualizing quaternions (4d numbers) with stereographic projection [Video File], 2018, Accessed (9 Nov 2021) <https://youtu.be/d4EgbgTm0Bg>



Figure 22. Broom Bridge Plate. n.d.¹⁶⁵

Often it is criticized that they are just exaggerations to enhance the narration of the story. It might be true although, it does not mean it is a product of systematic study. The human mind tends to stick in tunnel vision when focusing on things, resting time does allow the degree of freedom, or anonymous look to think outside of the box. Any occurrence point or place where they lit the solution, even though somehow related to the context is usually coincidental. Yet this resting-focus time distinction creates this tolerance space to allow and perceive new perspectives as in the distinction between private and public space.

¹⁶⁵ Broom Bridge Plate, 1843, Accessed (7 Nov 2021)
https://upload.wikimedia.org/wikipedia/commons/d/d5/Inscription_on_Broom_Bridge_%28Dublin%29_regarding_the_discovery_of_Quaternions_multiplication_by_Sir_William_Rowan_Hamilton.jpg

CHAPTER 4

SIHHIYE DISTRICT OF ANKARA

4.1 Brief Information About Sıhhiye

Sıhhiye stands out as one of the most important spatial nodes in the first steps of Ankara's process of becoming a planned administrative capital. Although it has not undertaken a role of a focal point or identity of the urban center, Sıhhiye as an instance of a *mediator* space offers an unobtrusive but essential function that is mostly lacking in the cities of the 21st Century. Briefly introducing Sıhhiye as an in-between space, it concatenates the old city center *Ulus* with the founding new one *Kızılay* in the Hermann Jansen's competition-winning plan for Ankara.¹⁶⁶ Sıhhiye contains Ankara's oldest and most central railway station. According to Ali Cengizkan, Sıhhiye Railway Station is “*the source for Lörcher's Administrative City*”.¹⁶⁷ Additionally, Sıhhiye Bridge which is standing at the intersection point of Atatürk Boulevard and Celal Bayar Boulevard is a distribution point for the highway public transport for two major axes of the inner city.¹⁶⁸

¹⁶⁶ Bülent Batuman, City profile: Ankara, 2011: 579-580.

¹⁶⁷ Ali Cengizkan, Türkiye için Modern ve Planlı bir Başkent Kurmak: Ankara 1920-1950, 2010.

¹⁶⁸ Serpil Özaloğlu, Sıhhiye Meydanı'ndan Sıhhiye Köprüsü'ne: Köprü'de Gündelik Hayat, 2011: 71.



Figure 23. Location of Ankara in the Republic of Turkey.¹⁶⁹

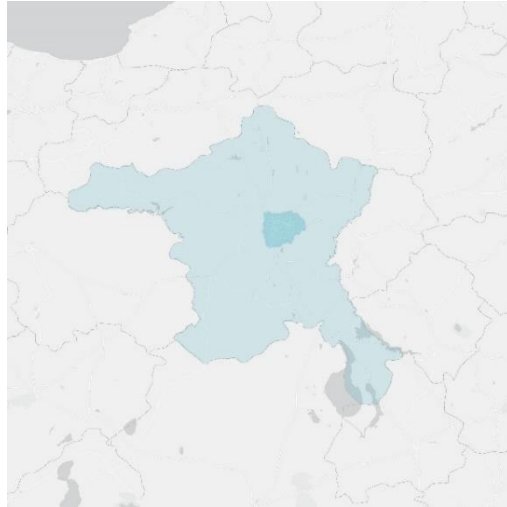


Figure 24. Comparison of inner- and municipal perimeters of Ankara.¹⁷⁰

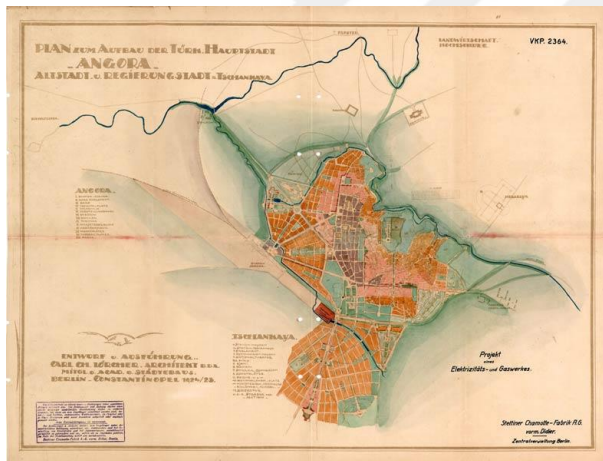


Figure 25. Lörcher Plan, 1924.¹⁷¹

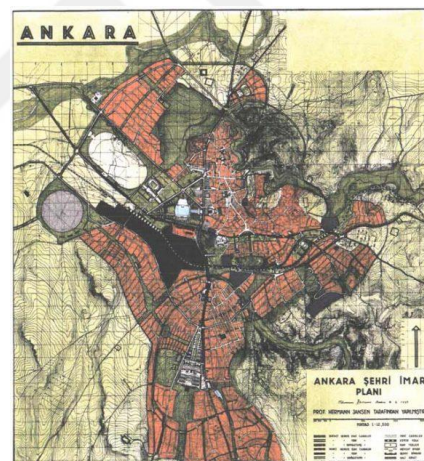


Figure 26. Jansen Plan, 1932.¹⁷²

¹⁶⁹ Figure produced by the author.

¹⁷⁰ Figure produced by the author.

¹⁷¹ Lörcher Plan, 1924. Accessed (27 Feb 2021)

https://www.goethe.de/ins/tr/ank/prj/urs/ins/tr/ank/pro/urbanspaces/web/loercher_gr.jpg

¹⁷² Jansen Plan, 1932. Accessed (27 Feb 2021) https://www.arkitektuel.com/wp-content/uploads/2018/11/Jansen_Plan%C4%B1-584x640.jpg

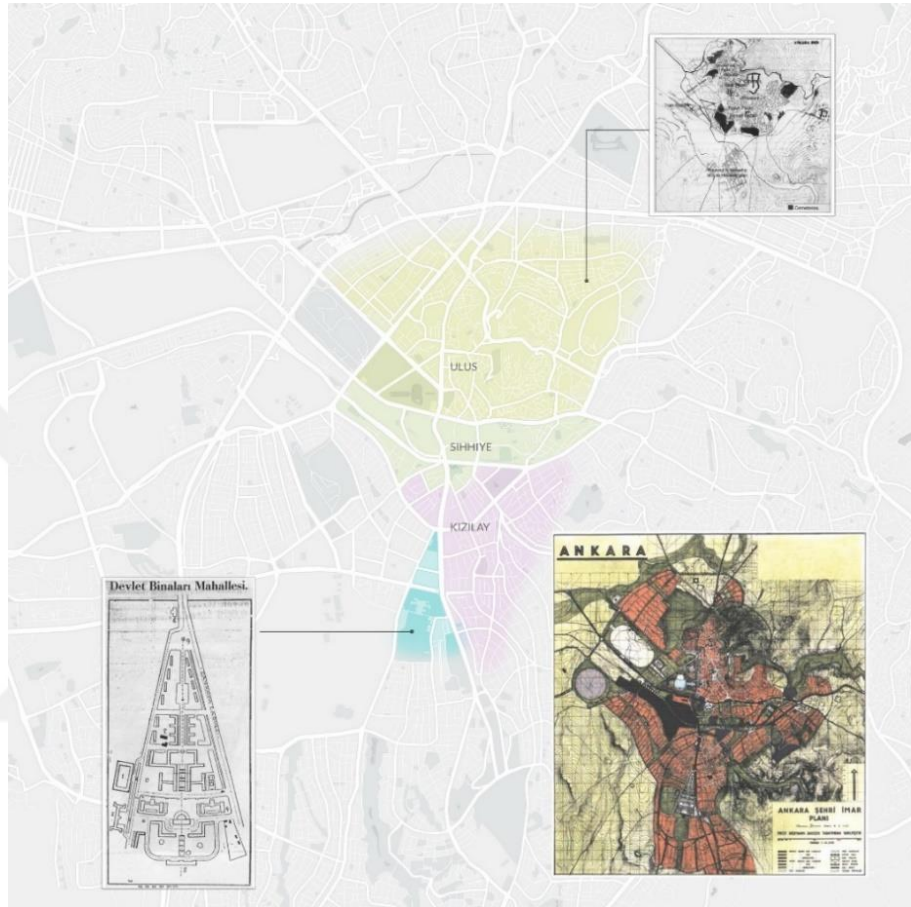


Figure 27. Sıhhiye in Ankara.¹⁷³

¹⁷³ Figure produced by the author.

Therefore, it is possible to claim that Sıhhiye is an important distribution point for the logistics of Ankara. Due to its location with natural accessibility and distance uniformity, Sıhhiye is one of the convenient places in the city to establish public open spaces and services. In line with this, Sıhhiye has always been the household for the oldest and most well-functioning hospital complexes, universities, state and culture buildings. Some of these noteworthy buildings could be pointed as Refik Saydam Hygiene Institute (RSHM, closed),¹⁷⁴ Ankara University Faculty of Language History and Geography, Hacettepe University Medical School, Ministry of Health (former),¹⁷⁵ Ministry of Culture, Ankara Courthouse, Ankara Painting and Sculpture Museum, Ethnography Museum of Ankara, State Opera and Ballet, CSO Concert Hall and Cernmodern Art Gallery. Sıhhiye also contacts with three of Ankara's well known urban green spaces; are Kurtuluş Park, Abdi İpekçi Park, and Gençlik Park.

¹⁷⁴ Building is currently standing idle in General Directorate of Public Health Campus.

¹⁷⁵ Building currently functioning as Governorship of Ankara.

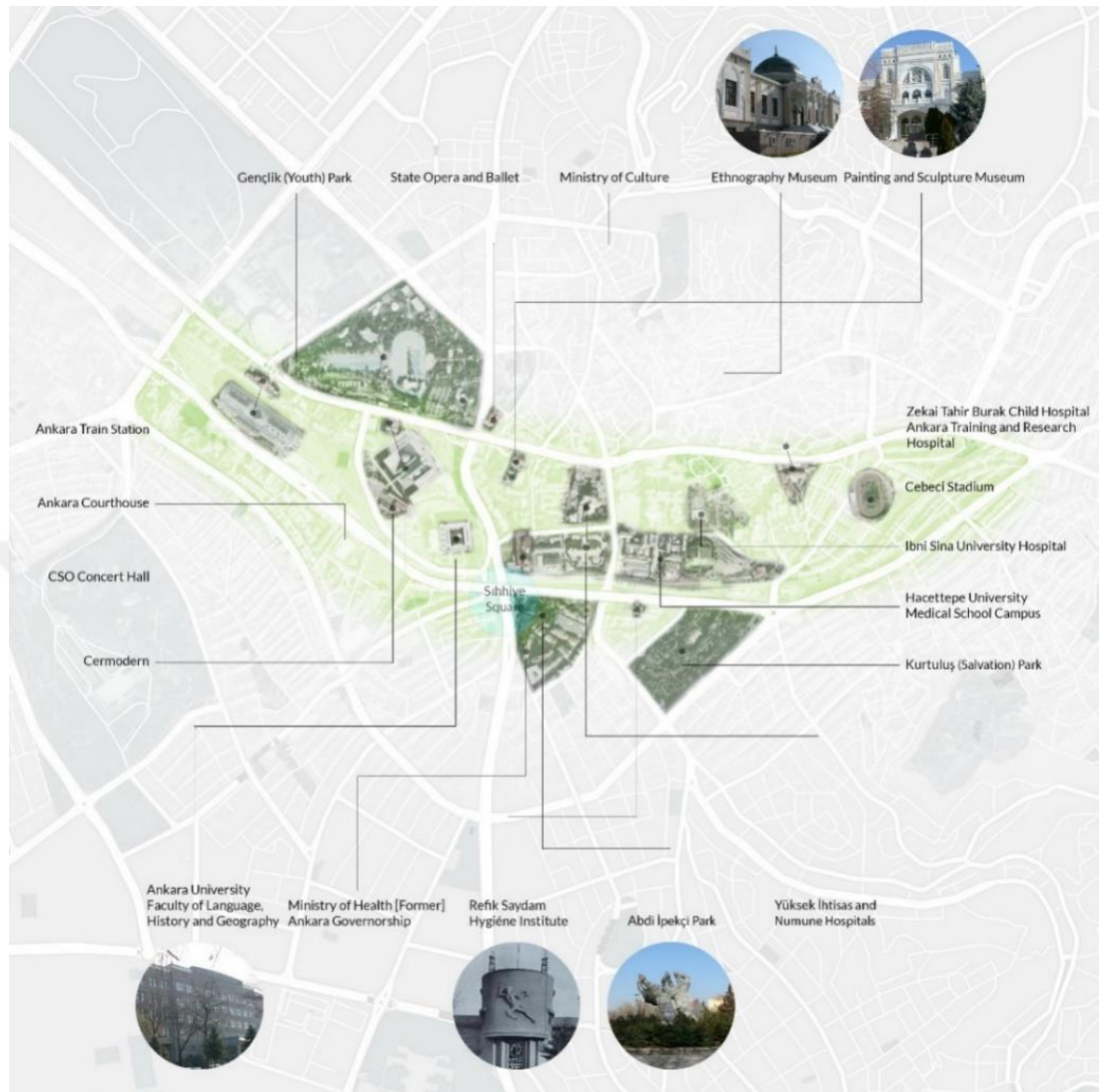


Figure 28. Some focal points in Sıhhiye. ¹⁷⁶

¹⁷⁶ Figure produced by the author.

Originally, Sıhhiye was planned to have a public square. According to Serpil Özaloglu, until the late 1970s, Sıhhiye was known for its public square. However, Sıhhiye Square has been devoured by highways through prioritizing vehicle transportation over the pedestrian.¹⁷⁷ Unfortunately, almost all planned public squares in Ankara suffer from this condition. Moreover, especially after the 2000s, the policies of Turkey drastically changed towards the neoliberal axis which resulted in the relocation of many of the governmental buildings in Eskişehir Highway,¹⁷⁸ and later as a country scope projection, the City Hospitals project was applied in Ankara.¹⁷⁹ These events unavoidably dimmed the functionalities of the urban historically defined nodes of Ankara including Sıhhiye and Kızılay. These interventions are widely criticized by scholars who are also the citizens of Ankara; the establishment and promotion of Eskişehir Highway are considered to create vehicle-dominated segregated places.¹⁸⁰ And, City Hospitals Project is dysfunctioning the well-established hospital complexes of Ankara. In another aspect, the project is far from offering a public interest but moreover projected the benefits and ideals of private interests. On another fold, dimming the roles of old planned districts of Ankara is regarded as actions that result in disjunctions within both the city fabric as well as the collective memory. This criticism represents one of the key points of this study.^{181 182 183}

¹⁷⁷ Kıvanç Kılınç, Öncü Halk Sağlığı Projelerinin Kamusal Mekanı Olarak Sıhhiye [Sıhhiye as the Center of Progressive Public Health Projects], 2002: 155-156.

¹⁷⁸ Tuğba Tekin, Transformation of An Urban "Vector": Eskişehir Highway, Ankara, 2008: 33-34.

¹⁷⁹ Eren Can Yücel, Restructuring Urban Space Through City Hospitals, 2020: 97-98.

¹⁸⁰ Cana Bilsel, Kentsel Dönüşüm, Çözülen Kentler ve Parçalanan Kamusal Alan, 2006.

¹⁸¹ S. Sak and B. Şenyapılı, Evading Time and Place in Ankara: A Reading of Contemporary Urban Collective Memory Through Recent Transformations, 2019: 346-350.

¹⁸² Güven Arif Sargın, Displaced memories, or the architecture of forgetting and remembrance, 2004: 659.

¹⁸³ N. Ç. Özgül and H. Vejre and C. Bilsel, Emergence and Evolution of the Urban Public Open Spaces of Ankara within the Urban Development History: 1923 to Present, 2020: 44-48.

Even after Sıhhiye lost its function as a pedestrian square, after the 2000s it was still a designated place for public demonstrations and protests which might be considered as empirical evidence that the collective memory of Ankara still refines Sıhhiye as a household for evolving and accommodating political discourse. Today fragmentation is traceable on both spatial and socio-political levels in the Sıhhiye District, which may allow one to read this as a condition correlating with the current societal contradictions in the country. This study suggests Sıhhiye is still to be considered as an important urban space since it carries a role of tolerance space which is a mediating point that allows the existence of diversity that is mostly lacking in the contemporary cities of the 21st century. Thus, the described condition marks Sıhhiye as a remarkable and interesting public space to be analyzed. For this purpose, it is attempted to investigate and describe the concepts that define a tolerance space and its inputs to cultivating a progressive society.

4.2 Context of Sıhhiye

The study of Sıhhiye as a tolerance space contextually includes a paradigm that established the decisions and urban infrastructure of the city of Ankara. The mindset that represents these decisions is structured upon the paradigm of modernity. The previous chapters pointed to the description of modernity as an attempt to change what exists over an ideal. This study offers a link between modernity and Sıhhiye in multiple perspectives respectively in name, location, function, all of which are articulated separately and superimposed, as being a part of the pattern that intersects in modernity. Gönül Tankut states,

Ankara is an administrative center that is intended to be directed from the eastern world to a rational world. What is expected from this city is not only to be a symbol but also to be a capital city that can fulfill all the functions of the new world understandings and project the appropriate lifestyle.¹⁸⁴

Starting from its name, the word 'Sıhhiye' derives from the word *Sıhhat* (health) in Turkish. The first known reason that comes to mind is that the name of Sıhhiye is taken from the building of the Ministry of Health, where the East facade of the structure faces the square of Sıhhiye. However, according to Kıvanç Kılınç, the concept of "health" has greater metaphorical projections on Ankara's illustration as a modern city and social engineering rather than a formative accidentalness.

The Turkish Revolution is in pursuit of both getting rid of the unhealthy structuring of the past and producing healthy individuals both mentally and physically. In other words, "public health" is one the largest social projects in the Republic. The country needs a modern "health and welfare" system that can reach every corner in a short time.

While examining the point reached in the fight against epidemic diseases since the first years of the Republic and effective progressive methods in determining health policies, the tenth health institution built-in medicine, and their urban spatial relations.¹⁸⁵

According to Kılınç, solutions for the major problems such as epidemics, nutrition, transportation, and lack of education in the early state of the Republic were

¹⁸⁴ Gönül Tankut, *Ankara'nın Başkent Olma Süreci* [The Process of Ankara to Become a Capital] 1988: 93.

¹⁸⁵ Kıvanç Kılınç, 2002: 125.

encapsulated and manifested with the metaphor of health. This problem of unhealthiness could be analyzed in two folds. In the early years of the Republic, the society that could not be fed properly due to poverty and broken by epidemic diseases constitutes the physical dimension of the problem. The secondary dimension reflects the mental congestion; forming educated and conscious individuals who will demand rights, law, and equality through centering logic and rationality. This condition represents the other fold within the description of the *health* of the Republic. Congruently, a model and projection of creating a healthy individual manifest as both signs and a formal interface over the city. The precedent steps were taken through the erected structures of the Ministry of Health and Refik Saydam Hygiene Institute in the new capital to organize the endeavor of *healing*.

These two buildings were the manifestation of the 'health project' of the modern Republic of Turkey. The aim was not scoped solely with Ankara but to spread and resonate within the whole country. Among the quantitative results of statistical data, achievements in the physical dimension of the problem through early Republic policies were emphasized by various scholars. RSHM started to mass-produce vaccines for BCG/tuberculosis (1927), tetanus (1931), diphtheria (1931), rabies serum (1937), cholera (1940), typhus (1942), influenza (1950).¹⁸⁶ Operations held by RSHM resulted in the fade away or complete disappearance of maladies which once caused countless tragedies.¹⁸⁷ According to a report held by the ministry of health, production for typhus (1971) and smallpox (1980) vaccines was stopped due to the complete disappearance of illnesses. As opposed to previous health policies, after the 1960s when the policies of Turkey started to align with

¹⁸⁶ Halk Halk Sağlığı Genel Müdürlüğü, Türkiye'de Aşının Tarihçesi [History of Vaccination in Turkey], 2018, Accessed (12 Feb 2021) <https://asi.saglik.gov.tr/genel-bilgiler/33-asinin-tarihcesi>

¹⁸⁷ See as cited in Kıvanç Kılıç, 2002, p. 125: 125.

neoliberal discourse, attitudes and priorities regarding health have also changed. The current conditions of the coronavirus pandemic crisis accentuated the criticism towards these changing priorities.¹⁸⁸



Figure 29. Refik Saydam Hygiene Institute. n.d.^{189 190}

The success as a result of the health policies of the Early Republican period was regarded as an outcome of the mindset based on modernity, i.e. changing conditions through objectivity and freethought to vitalize a better version of reality. Kılınç depicts that in the precedent models of organizational healthcare systems in the world, health services were neither free nor secularized. In European countries, hospitals were funded by churches, which reflectively resulted in, hospitals were not being able to act beyond the will of the church. The 18th Century is the prototypical playground of early secularized healthcare systems. Foucault describes

¹⁸⁸ Lale Elmacıoğlu, 1940'larda 20'ye yakın aşı üreten Türkiye nasıl ithalatçı konumuna geldi? [How does Turkey became an vaccine importer while producing approximately 20 vaccines in the 1940s?], 2020, Accessed (12 Feb 2021)

<https://www.indyturk.com/node/283221/>

¹⁸⁹ Refik Saydam Hygiene Institut. Accessed (27 Feb 2021)

<http://mimdap.org/2020/04/bir-hifzissihha-varidi/>

¹⁹⁰ Refik Saydam Hygiene Institute. Accessed (27 Feb 2021)

<https://www.yenimesaj.com.tr/resimler/haberler/29/sahi-refik-saydam-neden-kapatildi-H1339481-11.jpg>

the secular healthcare system as independent from the church.¹⁹¹ The idea of the secularized healthcare system is an autonomous (unbounded from authority) healthcare system funded by the government, that is accessible, just, and equal.

In the second step, there is the task of mentally healing the society, which is the task of building *an open society*. At this stage, Sıhhiye became an image of the early health policies of the Republic of Turkey. Although the RSHM, at first glance, merely suggests a solution to the physical aspect of the problem, the *interface* role of Sıhhiye, as well as the signs it contains and displays, conveys the messages more on the mental part. Kılınç examines the allegories of the Statue of Hygieia, a relief attached to the front façade of the RSHM building, from the semiological perspective. This figure, neither fits in the context of forming international style from the scope of architecture nor existent cultural sphere in its time and place. Firstly, as a figure, portrayed as a naked woman, Hygieia contrasts with the Islamic culture (especially with the veiling culture) that is dominant in Anatolia in the early 20th century. Next, in terms of association, Hygieia is an artifact from Greek Mythology, was directly conflicting with the dominant culture in its place and time. It was not there to depict symbolism on objects to signify nationalism and culture. However, the vision of the new Republic was beyond this condition. It aimed to create an open society thus the attempt was to embrace all as long as they are not discriminating against modern society or conflict with the reasoning of the organization. Thus, it hosted and invited civilizations that once existed in Anatolia, although it contrasts with what is existent in its time. In another fold, as a sign, Hygieia represents *health*. Hygieia embeds a message directly for the openness of society as opposed to othering.¹⁹² Rather than cultural glorification, the use of such a controversial fragment aims to convey a message of

¹⁹¹ Michel Foucault, *The Birth of the Clinic: An Archaeology of Medical Perception*, 1963: 55-69.

¹⁹² Kıvanç Kılınç, 2002: 145-146.

self-criticism to the Turkish people. Thus, Hygieia manifests the mental dimension of the health project of the Republic. Similarly, on the examination of the Turkish revolution from the scope of semiology, the difference in the signs of representation is also apparent. Throughout history, countries that are epitomes of human organizations have used signs to depict their idealized characteristic features. Among the signs that continue today, the United Kingdom uses a lion, the United States and Germany use an eagle, etc. The common aspects represented by those animals are usually, valor, strength, and nobility. Fractions of power are depicted through less-abstract symbolism.



Figure 30. Animal signs are chosen by various countries for representation purposes. Respectively, Royal Coat of Arms of the United Kingdom¹⁹³, Bundesadler (Coat of Arms of Germany)¹⁹⁴, Great Seal of United States.¹⁹⁵

France stands at an exceptional point on the subject. France represents itself as a woman, Marianne, a brave and confident woman leading the revolution. Marianne portrays the mind and reasoning of humans and their ideals as indicated on the

¹⁹³ Royal Coat of Arms of the United Kingdom. Accessed (27 Feb 2021)
<https://www.royal.uk/coats-arms>

¹⁹⁴ Bundesadler. Accessed (27 Feb 2021)
<https://www.bundestag.de/en/parliament/symbols/eagle>

¹⁹⁵ Great Seal of United States. Accessed (27 Feb 2021)
https://upload.wikimedia.org/wikipedia/commons/thumb/5/5b/Greater_coat_of_arms_of_the_United_States.svg/

motto of France: “liberty, equality and fraternity” on a character. The animals as signs that nations choose to represent themselves are characterized by more figurative and salient *fractions of power*. However, it is not strength nor speed that made humans available to overcome nature. Marianne, rather than reflecting feral features, signifies more abstract quality in which what has been argued above is a distinctive feature of humans. The reasoning and power of the mind are revealed through the organization. Thus, Marianne signifies the power of human organization directly with a sign that is opposed to what is conventional. Marianne as a symbol is more abstract. It encapsulates the concepts that emphasize the reason for the organization. In terms of both method and concepts, Marianne is more paralleled with modernity.



Liberté • Égalité • Fraternité
RÉPUBLIQUE FRANÇAISE

Figure 31. Depictions of France as Marianne. Respectively, Liberty Leading the People¹⁹⁶, Marianne Logo.¹⁹⁷

Correspondingly, on the search for signs of the early Republic of Turkey, in line with France, the society was portrayed as a brave and confident woman. Through

¹⁹⁶ Eugène Delacroix, 1830, Liberty Leading the People. Accessed (27 Feb 2021)
https://upload.wikimedia.org/wikipedia/commons/a/a7/Eug%C3%A8ne_Delacroix_-_La_libert%C3%A9_guidant_le_peuple.jpg

¹⁹⁷ Marianne. Accessed (27 Feb 2021)
https://promotemyplacecdn.azureedge.net/wrpmpassets/Uploads/Blogs/2584/Marianne_logo.png

the instance of Hygieia, Sıhhiye embodies these signs. The signs convey the messages of the mental dimension of the 'healing' project. Beyond that, Sıhhiye does not only convey messages for open society but also, bears an active role to vitalize open society through its *interface* function.



Figure 32. Depictions of Turkey as a black-haired confident woman in early posters of Turkey.^{198 199}

To grasp the role of the interface, it is necessary to indicate another important concept, which is secularism. Another conceptional framework shared by France and Turkey is their application of secularism. However, Secularism in French is different from secularism as discussed in other western societies.²⁰⁰ Thus this difference is also reflected in the linguistic formation. While secularism implies that religion and state affairs should be separated, *Laïcité* (a word in French to indicate secularism in France) directly deduces the existence of religion within the

¹⁹⁸ Republic of Turkey Depicted as Woman. Accessed (27 Feb 2021)

<https://i.pinimg.com/564x/f0/ea/cb/f0eacbe4f33eb17a0f20c169ae0b73aa.jpg>

¹⁹⁹ Republic of Turkey Depicted as Woman (Second). Accessed (27 Feb 2021)

https://www.reddit.com/r/PropagandaPosters/comments/b3s708/turkey_1934_national_suffrage_for_women/?utm_source=share&utm_medium=ios_app

²⁰⁰ Ernst Bobek, *Laïcité Prehistory, History and Outlook* [Laïcité Vorgeschichte, Geschichte und Ausblick], 2008: 73.

organization. It prohibits all kinds of a sign, symbols, and religious activity within governmental publicity. This action is to prevent a mechanism of *the authoritarian leap*, in the times where society shows dispersion.²⁰¹ The Turkish word for secularism *laiklik* derives from French origin. And, it applies the same principles. This condition reflects how the concept of tolerance space is formed. The distinction between open and closed society is discrimination i.e. *othering*. However, acceptance does not mean allowing the participants to dictate their way of living to the rest of the organization. The porosity of the tolerance space can only be formed on the plane of rationality by unrefuted universal rules. At this point, *Laïcité* is the concept that defines the limits of tolerance space within the context of *porosity*. It is an interface that acquires the function of preventing a layering within society that contains the possibility of forming classes, or any other type of segregation within the society.

As aforementioned Sıhhiye links Ulus and Kızılay. Although, as in the name of the Ulus (*Nation* in Turkish), the national struggle has started and gathered dispersed people with an aim, the modern society aimed by the Republic aimed to create a society that desires to live fair and equal, but sustainable and self-sufficient unlike what is often proclaimed and praised by the flux of nationalism as the warriors or conquerors of the old world. This idea reflects the opposite of the policy of infinity.²⁰² It is considered that modernity is concerned with sustainable solutions. It wants to keep up with the highest consciousness of its epoch by coming to the forefront through the structure that generates its values and creates itself. Ulus was the existent space, that not easily broke the bonds with the past. And, due to its

²⁰¹ "Secularism guarantees freedom of conscience. From this derives the freedom to manifest one's beliefs or convictions within the limits of respect for public order. Secularism implies the neutrality of the State and imposes the equality of all before the law without distinction of religion or belief." Accessed (11-Feb-2021)
<https://www.gouvernement.fr/qu-est-ce-que-la-laicite>.

²⁰² Pier Vittorio Aureli, 2011: 42-45.

organic development, it was spatially unable to offer places to the demands of the open society.

Ankara's pioneering position in urban and cultural modernization becomes more evident with the reading of the names of urban public spaces, naming the region, which is one of the birthplaces of the new Ankara, as Ulus (nation), nothing more than registration of a brand new healthy nation. The struggle for emancipation and independence has emerged and won in Ulus and victory is ornamented by Atatürk Monument and Ulus Square. The ideology, which coincided with the first years that attempted to be at least self-consistent reflected in the variety of architectural language in the urbanscape of Ulus.²⁰³

Although Ulus achieved a certain success, Ulus was thought to not portray modern society and its demanded spaces. The objective to be taken is to reach modern society. As modernity is an endeavor from existent to better, modern society moves towards the city square. To evolve the people that have lived their lives by closest analogy *serfs* under a feudal order with war, hunger, and suffering to society consist of modern individuals who will demand rights and law, the new state considered the creation of healthy individuals as its primary task. There exists a tension between imposition as well as habitual living and a new lifestyle that Republic offered. This tension embodies the danger of distinctive clustering within the society which may form the foundations for othering that poses the danger of class segregation. In the early years of the Republic, it is anticipated that issue of othering will result in tribalism which is considered as an obstacle in front of the

²⁰³ Kivanç Kılınç, 2002: 138.

organizational complexity. This condition is still evident in social conjuncture as well as the spatial practice of urban fabric.²⁰⁴

Nevertheless, the idea of open society proposed by the Republic stands against previously applied organizational models based on social layers, such as the caste system²⁰⁵ or feudal system.²⁰⁷ The common point among these systems is that individuals' lives are highly determined by the existent conditions in which the individual was born. However, modernity promotes *earned* over *innate*. Thus, *fate-based social organization* is classified by the new Republic as unhealthy. Therefore, it is desired to create a new public open space that will form the heart of the city. However, neither leaving Ulus as it is nor recreating it was considered to be an appropriate solution. Both considerations were autocratic in a way to form the envisaged danger of social layering. One can speculate that it may be precisely for this reason that the metaphor of health takes place in the interface space that is supposed to provide communication and transition points between the old and new. Sıhhiye is regarded as an illustration attempt of the concept of *communicative rationality* by Habermas.²⁰⁸ Interface function is also, an act of rationalization in which the open society project of the republic justifies itself against other organizational models. The conceptualization of health in the Sıhhiye district is then classified into physical and mental aspects. The corresponding architectural archetype for the physical aspect of the problem in the hospital, and education

²⁰⁴ İnci Basa, 2018: 231-233.

²⁰⁵ "Use of the term caste to characterize social organization in South Asia, particularly among the Hindus, dates to the middle of the 16th century. Casta (from Latin castus, "chaste") in the sense of purity of breed was employed by Portuguese observers to describe the division of Hindu society in western and southwestern India into socially ranked occupational categories." In Encyclopedia Britannica, 2019.

²⁰⁶ See also "What is India's caste system?" In BBC, Accessed (11 Feb 2021) <https://www.bbc.com/news/world-asia-india-35650616>

²⁰⁷ J. Habermas, S. Lennox, F. Lennox, The Public Sphere: An Encyclopedia Article, 1974: 50-51.

²⁰⁸ Jürgen Habermas, 1992: 127-132.

complexes are to establish communicative rationality that resonates with the mental aspect of the problem of *unhealthiness*. The third dimension to this, as it develops consciousness and expands the limits of cognition through revealing new horizons, progress constitutes the third pillar of the health project as well as modernity. The ability to think beyond the existing through inspiration is art. In other words, architectural archetypes of art make up the third and last pillar of the health project of the Republic. Congruently, in the first years of the Republic, well-functioning hospital complexes, education, and art structures of Ankara are clustered in Sıhhiye.



Figure 33. Presidential Symphony Orchestra in CSO Concert Hall (Old). n.d.²⁰⁹

A good illustration of a given statement, along with the Ankara Opera House, Cermmodern (Contemporary art gallery) and Painting and Sculpture- and Ethnography Museum, CSO Concert Hall (old) stands in the heart of Sıhhiye. Art is accessible to all citizens of Ankara in terms of both distance and financially.²¹⁰

²⁰⁹ CSO Concert Hall - Presidential Symphony Orchestra. Accessed (29 Dec 2019) <https://i4.hurimg.com/i/hurriyet/75/0x0/5ce2a8fb7152d80c687ce8d3jpg>

²¹⁰ See Appendix D: CSO Concert Hall (Old and New), 2021. Unlike the modest unornamented presence of Old Concert Hall, New Concert Hall considered to be

In addition to this, the courthouse in Ankara and one of the republic's designed squares are located in the heart of Sıhhiye, while a large part of the city's administrative building is located in the new city center, the choice of Sıhhiye for the courthouse is another decision that implies the egalitarian stance. Today, with the change of the city's growth and the project of city hospitals, the function of the Sıhhiye in the city context has been dimmed and it is seen by academics as a decaying, segregated, and left-over area. Although this study participated in the criticisms that the role and shape of the Sıhhiye transformed with the changing political and social structure, it claims that the designed interface task, which is partially defined as a necessity in the cities of modern society, should be realized even if it is accompanied not with a perfectionist understanding. At this point, the qualities of Sıhhiye as of substantial tolerance space will be articulated.

4.2.1 Sıhhiye as Tolerance Space

4.2.2 Accessibility | Openness

Sıhhiye houses various educational, health, art buildings, governmental, and justice complexes within the uniform limits of accessibility for the citizens of Ankara. Therefore, Sıhhiye is a place for one to meet with *the other*, unlikely to semipermeable antithesis places of capitalist means of production such as the mall, gated communities, and suburbs.²¹¹ The porosity of Sıhhiye reflects on abstract qualities indicated as *laicitee* rather than selective permeability based on social layers (classes). This argument can be supported by the example of the mechanism that makes available the selective permeability of places. As the most obvious examples, malls, and gated communities have their control points for *selective*

monumental protest through distinctive platonic solids and the contrast of high art against glorification of populist discourses in Turkey.

²¹¹ Cana Bilsel, 2016.

permeability. And suburb may seem that it does not contain such type of permeability, but it restricts its *accessibility* in terms of transportation. The accessibility represents the condition of openness of the Sıhhiye. On the other hand, the porosity of Sıhhiye comes from anonymity. Since Sıhhiye is the node of a large variety of interests, it is not an occupied space for a particular group (tribe) or sub-organization.²¹²

Although Sıhhiye is a designated space as a part of social engineering projects it is an organic interface space. In this study, this condition is interpreted as an example of the idea of *piecemeal social engineering*^{213 214} as suggested by Karl Popper as an alternative method to progress against *utopianism*. It is always a controversial point to talk about the concept of *progress*. What action should be regarded as progressive, and according to whom? At this point, neither majority nor singular will provide a valid answer to this problem. It is this contentious state which reveals the scope of tolerance space. Description of piecemeal social engineering justifies itself with modesty. Pioneer does not offer finite or excessive push to society. But takes a step forward, it aligns society towards better but it does not push or dictate. The function of Sıhhiye as a mechanism of tolerance works as the intersection point of *piecemeal social engineering* and *communicative rationality*. Sıhhiye is not a controlled space by a regulating authority. But it has guidance. Since it is not controlled, but rather guided, the spatial experience of Sıhhiye is not uniform. Thus, it is not always pleasant or *pure*; and, it should not be. This situation is a result of breaking away from utopianism and coming into contact with reality.

²¹² Ferdinand Tönnies 1887: 227-230.

²¹³ Karl Popper, *The Poverty of Historicism*, 2002: 63-64.

²¹⁴ Esin Kömez Dağlıoğlu, *Karl Popper's Architectural Legacy: An Intertextual Reading of Collage City*, 2016: 113.

Sihhiye provides a *distance uniformity* both physically, financially, and psychologically. This condition grants it the first fundamental aspect to define tolerance space that is accessibility. However, being an accessible space does not necessarily mean having unconditional permeability. Sihhiye is a porous space that has a certain control mechanism to set the second limit of tolerance space (tolerance space always exists with two limit points). However, unlike the identical places of neoliberal infinity, *the porosity* of Sihhiye is achieved through certain qualities rather than provided by the authority.

4.2.3 Porosity

Amos Rapoport gives examples of how urban space is divided among segregated sub-organizations within the organization that is identified as a *closed society*.

Urban space generally is divided into domains distinguished by various rules and symbols. Their purpose is to establish boundaries between us and them, public and private, thus ensuring the desired levels of interaction, inclusion, or exclusion and providing the appropriate defenses. All these differ among various groups so that if privacy is defined very broadly as control of unwanted interaction, then "unwanted", "interaction" and "control" are all variable and matters of definitions so that there are differences in the tolerance and, indeed, preference of various interaction levels.²¹⁵

This segregation for instance occurs in the American cities that were criticized under the theorization of the infinite city by Aureli. The condition of porosity is

²¹⁵ Amos Rapoport, 1977: 289.

traceable in Sıhhiye as it does not reflect the condition of Rapoport argued for the American City. Unlike the segregation of infinite, Sıhhiye does not contain *marks of the closed society* as "rules and symbols" that Rapoport mentions. It is not a place of *occupation*. Sıhhiye welcomes all who wanted to be part of the whole. From the organizational point of view, it does not suffer from the problematic conditions of tribalism.

This condition may be traced through the statues and monuments in Sıhhiye. Monuments as reference points of collective memory are not frequent in Turkey, unlike the European or American cities. As a result of the unique condition of being a library of collective memory, Sıhhiye contains a relatively high number of monuments compared to other Anatolian cities. In Sıhhiye there are sculptures to stress concepts of justice and progress through the Turkish revolution and to vitalize artists and intellectuals. However, three of them are distinctive, in terms of both size and value of the representation as they are linked within the memory of people with the characteristic features of Sıhhiye. The first of these monuments, as mentioned before, is *Hygeia*, which represents the health project of the republic as well as the message of the open society. The second example is the *Hittite Sun Course* (1978) by Nusret Suman, a monument standing in the middle of Sıhhiye Square; again Sun Course is a relic of ancient Hittite people who once lived in Anatolia, similar to Hygieia Sun Course is not there to represent existent cultural glorification, but acceptance of a disjoint culture, stressing the openness of civilization. In this context, the message of the Hittite Sun Course is not much different. It reveals, the idea of an open society. The third and apparent sculpture in Sıhhiye is *Eller* (1981)(hands) by Metin Yurdanur, which stands in the Abdi İpekci Park.



Figure 34. Hittite Sun Course Monument, Nusret Suman, 1978.²¹⁶



Figure 35. Hands, Metin Yurdanur, 1981.²¹⁷

This study suggests, the manifest of monuments in Sıhhiye gradually becomes more abstract and faded over time. One possible reason for this situation that revolution is occurred from top to bottom, however, Republican authority did not want to be an autocracy, but rather an autonomous civil society. Therefore, they proposed steps of progression. While the message in Hygiea is pungent, the same message fades in the Sun Course and lately, it leaves subtle in the Eller. Eller does not convey, dictate or represent a clear message beyond its powerful artistic presence. An art object grants a plane for people to derive and claim their own, a source of inspiration rather than an attempt of alignment on the way of thought. On another aspect, what is most apparent in Eller but existent in other how it speaks does not lie in what it says but rather what it does not say. Articulated monuments that are considered of defining the characteristics of Sıhhiye do not accommodate any ideological references that might result in societal dispersion with the statements of othering. They reflect a timelessness, remind notions of art and the legacy of humanity as well as remind us we are both readers and authors.

²¹⁶ Photograph by the author.

²¹⁷ Photograph by the author.

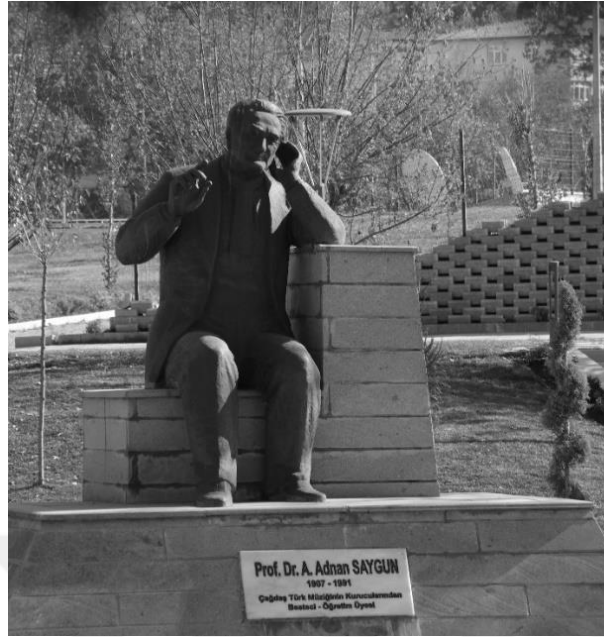


Figure 36. Sculpture of Ahmet Adnan Saygun. 2021.²¹⁸

²¹⁸ Sculpture of Ahmet Adnan Saygun One of the pioneers of western classical music in Turkey. Photograph by Mehmet Ali Coşkuner.



Figure 37. The Nymphs, 1925. ²¹⁹



Figure 38. Hygieia, Wilhelm Frass, n.d. ²²⁰

Thereupon, Sıhhiye is an *unoccupiable place*. The porosity of Sıhhiye is distinct from the capitalist means of production; the permeability or control is not dependent on authority but the organic rationality of society. The excess of freedom of sub-organization is limited through unoccupiability. Therefore, the porosity of Sıhhiye is shaped upon as indicated in the idea of *laicitee*.

4.2.4 Anonymity

The condition of unoccupiability also brings the most important aspect of the city that distinguishes it from the other types of settlements. Anonymity is the aspect that guarantees and exceeds the limits of freedom through the organization. Since it's a place to meet with the other, the individual does not feel the control and code of the sub-organization. This condition may be exemplified by the reasoning of the

²¹⁹ Photograph by the author.

²²⁰ Wilhelm Frass, Hygieia. Accessed (27 Feb 2021)
<https://i.pinimg.com/564x/dd/4c/d4/dd4cd4c0b628bbd9bcb2fe77c7e62622.jpg>

anonymous voting system.²²¹ An individual can only decide his own free will when s/he is not under any pressure or domination.

In terms of its spatial qualities, Sıhhiye as an unoccupiable space is a place to see and to be seen and meet with the other i.e. the stranger, foreigner. From the perspective of the individual, this condition grants the user anonymity, freedom to act beyond the boundaries of rules of the sub-organization. Anonymity expands the limits of intrinsic freedom. Thus, here, it is offered an answer for the question of why the city is different from the other type of human settlements? The commonly accepted methods for the discretization of human settlements are depending on population, scale, and size.²²² Magnitude is not solely enough to describe a city, although it is an important parameter. The city is not an agglomeration of sub- or minor settlements such as villages and towns. It contains greater dimensionality beyond the understanding of magnitude. Aureli describes the distinctive feature of the city as it contains a political space which in this study, is interpreted in multidimensionality of different dichotomous extremities. A city offers freedom and opportunities, unlike the other settlements as it also requires higher-level solutions as this contains greater complexity. Thus, from the subjective part of the individual point of view, as a tolerance space, Sıhhiye guarantees the enhancement of freedom through the aspect of anonymity and emancipates their boundaries of action from the code of sub-organization.

²²¹ "Anonymity allows individuals to make unprejudiced decisions on the basis that these decisions cannot come back to haunt the voter. In modern society, and more specifically modern democracies/republics, most public elections occur with almost anonymous voting". Drew Stone, 2019, Anonymous Voting – A Design Survey.

²²² Constantinos A. Doxiadis, *Ekistics: An Introduction to the Science of Human Settlements*, 1968.

4.2.5 Engagement

Beyond the expanse of individual freedom through anonymity, the *encounter with the other* offers possibilities, although it does not always promise a comfortable experience. These opportunities are argued by Sennett as opportunities of engagement.²²³ The first opportunity of engagement is, information exchange, meeting, talking, and knowing about new and other people, which increases individual perception, new perspectives, and reasonings. The second opportunity of engagement is confrontation. It reveals a new perspective. As long as it is sincere and fair, multiperspectivity and reasoning prevent layering within the society and allow to perceive causality of the other and to solve problems within the holistic understanding. Confrontation is not a mere act against others but, through others; it is a mirror to reflect critically upon one's thoughts as well. Therefore, the opportunity of confrontation allows the person to inquire about the structure of thoughts that the one is constructed. So through objectivity, it prompts the ability of self-criticism. The opportunity of confrontation is a reflection of criticism as quality on the spatial projection. Criticism constitutes the fundamental aspect of civilization. From subjective imagination to create realities that can alter the existing conditions that sculpted and touched by reality could only be achieved if criticism will be a living phenomenon in/with the society.

4.2.6 Demand

The third opportunity of engagement is, perhaps as a result of the confrontation, rationalizing *the demand* for justice. This study suggests, as an interface space, one of the functions Sihhiye has projected the concept of demand as a spatial quality. On the observation of the architectural archetypes to vitalize concepts of justice, equality, and communication, unlike the other administrative structures of the city,

²²³ Richard Sennett, 2014: 2.

Ankara Courthouse is located in an almost most central position in Sıhhiye. Besides, municipality-people interaction units known as the blue board (Mavi Masa) to communicate with citizens also stand in Sıhhiye. However, these structures function as the communication interfaces between authority and society. An unfair rate of contribution income in the organization, which is regarded as exploitation, and articulated by game theory in the previous section, should turn into a form that should be capable to carry out a protest action against the authority. Modernity rationalizes an episteme in which effort is valued not what is acquired by chance, i.e. *earned* over *innate*. Being an individual of modern society is only possible with constant criticism, education, and confrontation. Therefore within the context of sustainability, freedom could only exist if one understands and demands it rather than accepting unconditionally accepting what is given.

A healthy individual should be able to spot logical fallacies, to claim self-consciousness and intrinsic freedom. One's thoughts must be his/her own rather than someone else's motives. Thus, then one can demand, defend, and exist as an individual. Demand and protest as a result of the engagement, are the actions that can only be performed by *modern individuals* which are aimed at the mental pillar of the Republic's healthcare project. Thus, the early Republic's idea of the open society is distinct from utopianism and it does not dictate an ideal to society but, propagates a ground for them to establish individuals' ideas and identity. Even the justice is not an existent condition for an individual, one should demand it. As a part of the organization, one should be able to perceive and criticize the conditions. The action of protest, thus, reflects the pursuit of the individual to civilization.



Figure 39. Frames of public protests in Sıhhiye. ^{224 225}

Sıhhiye is a designated place to be a collective memory. The first mark could be traceable from Museums. They appear as immersive libraries of the collective memory of described qualities. However, what is more apparent, The Square of the Sıhhiye is engraved in the collective memory of the people of Ankara as a *place of protest*.²²⁶ Although the square is devoured by highways until the 2010s it was used adaptively for anyone subject of othering as a place of demand to justice and equality within the scope of democratic societal action. Decades-long, Sıhhiye offered the opportunity to be a *speaker* for an individual within the society.²²⁷ This opportunity is regarded as the greatest quality which defines Sıhhiye as a tolerance space. Because it makes it possible to reflect the concept of demand on the spatial level without any *autocratic selectivity*.

²²⁴ Public Protest in Sıhhiye. Accessed (27 Feb 2021)
<https://www.evrensel.net/haber/83435/ankarada-bolunmeye-karsi-isci-mesaji-birleserek-kazanacagiz>

²²⁵ Public Protest in Sıhhiye (Second). Accessed (27 Feb 2021)
https://foto.sondakika.com/haber/2013/05/19/ankara-da-vatan-cumhuriyet-ve-emek-mitingi-3-4648267_o.jpg

²²⁶ Bülent Batuman, *Imagination as Appropriation: Student Riots and the (Re)Claiming of Public Space*, 2003: 270.

²²⁷ Sıhhiye as place of demand in various newspaper entries, Table 1 in appendix.

The concept that is rationalizing the organization within the holistic understanding, is a reflection of criticism as occurred in the form of demand. As a product of the complex organization, tolerance spaces bear the essential multiplicity of functions such as anonymity, mediation, and demand.

4.2.7 Multiplicity

Karl Popper marks the problematic condition of utopianism.²²⁸ *Utopian social engineering*, although it demands change, paradoxically, is closed to change. In the determination of idealism, a utopia becomes blinded to criticism, it does suffer from being overdesigned and finite. As an alternative method, Popper suggests a piecemeal social engineering approach. An idea that sounds reasonable should be annealed through criticism of others. Thus, piecemeal social engineering requires criticism, and to produce criticism there has to be a variance of political existence within an organization. This condition is encapsulated as the quality of multiplicity. Multiplicity requires both the magnitude and political existence of the contributors within the organization. On a public scale, through constructing an opportunity of unoccupiability, anonymity, being a speaker, and demand; it is suggested, Sihhiye already offers a level of multiplicity. It is also possible to inspect the conceptualization of multiplicity over architecture. Modernity as it resonated within the discipline of architecture, replaced conventional understanding of construction and aesthetics; the idea, the pattern becomes before style or object or architecture itself.

²²⁸ Karl Raimund Popper, 1945, 2019: 153.

Multiplicity is a concept that resonates with the interpretation or hypothesis. When explaining the scientific method Karl Popper uses the concept of *falsification*.²²⁹ Description for falsification is bilateral. On one side, a hypothesis, to be able to be accepted as science has to be able to be falsifiable, or in other words, it should be able to have a control mechanism to be projected on reality. On the other end, it is never possible to say that a hypothesis is 'proven', as there is always the possibility of exploring new parameters which we are not aware of. What is scientifically valid is unrefuted theories. In the philosophy of science, according to Popper, a theory is an assumption we make about reality from what we premise from constants of existence. This assumption is a subjective imaginary projection that one makes on reality. Without this imaginary projection, we cannot reach the truth. Thus, a falsifiable illustration of subjective consciousness represents the starting point of imagination i.e. *generator*. On the other hand, criticism represents the *control mechanism* that justifies the validity of generated illustration. The coexistence of different, thus, reciprocally creates the generator and the control mechanism.

Therefore, multiplicity became one fundamental phenomenon that constitutes modernity representing reality. Modern, which later began to turn into a style in the hands of capitalism, has become a paradoxical paradigm that conflicts with its concepts. It is possible to instantiate this problem in the domain of architecture. Martin Wagner and Bruno Taut criticize the transformation of the formal language of modernism which claims to be universal, into a cubic style and understanding that anything non-cubic to be excluded from modernity.^{230 231 232} Capitalist understanding of modernism reduced the paradigm of modernity to be perceived as

²²⁹ Karl Popper, *The Logic of Scientific Discovery* [Logic der Forschung]. 1935: 27-28.

²³⁰ Manfred Speidel, 1994, as cited in Kıvanç Kılınç, 2002: 133.

²³¹ Marshall Berman, 1988, as cited in Burak Erdim, 2007: 108.

²³² İnci Aslanoğlu, 2001, as cited in Kıvanç Kılınç, 2002: 131.

the singularity of a formal style. Nevertheless, modernity is about patterns rather than instances. Sıhhiye has developed into a laboratory that reflects the spatial projections of health projects, which developed as a nation-state then evolved to create an open society. An illustration for this condition might be, Turkish Heart Building (1926-1930) that designed by Arif Hikmet Koyunoğlu, as headquarters for the nationalist organization.²³³ Although it is arguable the intention of the social aspect of the building regarding the discussed features of modernity, Sibel Bozdoğan marks those attempts as “*first moderns*”. According to her:

... one can talk about the National Architecture Renaissance as the first “modern” discourse in Turkish architectural culture. It was the first systematic engagement of Turkish Architects with new building types, construction techniques, and design principles.²³⁴

Turkish Heart and Ethnography Museum of Ankara with domes, arches, and geometric patterns, superimposed on cartesian axes is an application of *Beaux des Art* design principles on what is considered as Turkish architectural elements. Yet, later on, the contradiction of Ottoman Revivalism and Republican intention of the divorce of modern Turkey from the Ottoman past became apparent. For the vitalization of through the vision modernity to be represented on architecture. European architects and urban designers were invited to Ankara to shape new urban spaces. Yet, it is visible in Ethnography Museum, a clear declaration reflects the multiplicity and embracement of multiplicity, as also appeared in the Hygiea, a display and call for an open society.

²³³ İnci Basa, *From Praise to Condemnation: Ottoman Revivalism and the Production of Space in Early Republican Ankara*, 2015: 719.

²³⁴ Sibel Bozdoğan, *Moderism and Nation Building: Turkish Architectural Culture in the Early Republic*, 2001: 20; 47.



Figure 40. Ankara Painting and Sculpting Museum. 2021. ²³⁵ ²³⁶

The second building to be mentioned is the Refik Saydam Hygiene Institute (1927-32, RSHM) building along with the Ministry of Health (1926-1927), designed by Theodor Jost.²³⁷ These two buildings are the identification marks of the health project of the Republic. Regarded as early examples of the *international style*²³⁸ in Turkey RSHM bears volumetric priority, truth to material principle,²³⁹ and the early principles.²⁴⁰ The only exception is the adoption of symmetry²⁴¹ rather than asymmetric balance. Free from ornaments, austere and functional building, reflects the rejection of ornament with an exception. The sculpture of Hygieia, a figure of hygiene, contradicts the idea of abstraction in modernity. However unlikely

²³⁵ Photograph by the author.

²³⁶ Photograph by the author.

²³⁷ Goethe Institut Ankara, 2010, Accessed (27 Feb 2021)
<https://www.goethe.de/ins/tr/ank/prj/urs/arc/jos/trindex.htm>

²³⁸ İnci Aslanoglu, *Modernizmin Tanımı, Sınırları, Erken Yirminci Yüzyıl Mimarlığında Farklı Tavrılar* [Definition and Limits of Modernism, Different Attitudes in the Early Twentieth-century Architecture], 1988: 59-60.

²³⁹ Esra Şahin Burat, "Let the Stone Appear as Stone, Wood as Wood": Frank Lloyd Wright's Theory Of Materials, 2012: 337.

²⁴⁰ Kenneth Frampton, *Modern Architecture: A Critical History*, 1980: 248.

²⁴¹ Bilateral symmetry is the existent property of most terrestrial living beings. Thus, there is the perception that symmetry is a divine mark of aesthetics since ancient times. Most of the absolute authorities used symmetry as a form of language to depict divine legitimacy for their rule. This condition is considered as one of the reasons why modernity rejects symmetry.

Baroque ornaments, ornament does not appear to display focal power. It is not to represent power, but a message of an open society. As multiplicity means being able to exist without disappearance even though it is not dominant. Although it contrasts with the principles of universal style, it parallels with modernity itself. An example reflects how Sıhhiye accumulates multiplicity. The last mention to epitomize multiplicity in Sıhhiye is the Ankara University Faculty of Language History, and Geography building (1937-39) by Bruno Taut.²⁴²



Figure 41. Ankara University Faculty of Language History and Geography.
2021.^{243 244}

with its weighty prismatic masses, created a heavy expression in contrast with its playful use of stone in the façades, its asymmetric canopy, and its repeating square windows. Ankara's new higher education institute, The Faculty of Language, was spatialized through a formal and heavy aesthetic.

²⁴² Kıvanç Kılınç, 2002: 148.

²⁴³ Photograph by the author.

²⁴⁴ Bruno Taut, 1937, Perspective Sketch of Academy for Language, History and Geography. Accessed (27 Feb 2021) <https://kuenste-im-exil.de/KIE/Content/EN/Topics/deutsche-architekten-im-tuerkischen-exil-en.html>

...Taut emphasized regional identity and function. He held that all discussions of architectural form and style should be abandoned to reach the essence of architecture.²⁴⁵

Built by local materials, the front façade contains “*Science is the only true guide in life*” statement of Mustafa Kemal Atatürk. This decision once again is contradicting with accepted formal principles, uniformity, and abstraction of modern architecture. The idea is, the form should express itself uniformly, the relationship between sign and signified is arbitrary, as a sign what is said, appears inconsistent. Nevertheless, what is felt is real. Thus, it is aimed rather than the dictation of statements relies on being perceived in simplicity. Yet, the purpose of Taut does not appear to reflect as a form of indoctrination, but the proposal of steps to progress in society. Taut is differing from the other architects who came to Turkey. Because the production of the architect, who is known to be socialist, also exists discursively. Taut criticizes the reduction of modernity to the *cubic style*. Despite, he contradicts the formal consensus of modern architecture, it would be wrong to think Taut out of modernity.

Sıhhiye contains a variety of formal language concerning architecture. Although those languages conflict with the universal language of modern architecture developed through 20th-century episteme, it is suggested that as a result that they are aligned with the concepts of modernity, this condition is the representation of multiplicity. This variety of acceptability refers to multiplicity. It is significant to address, the unobtrusive trade-off of rigidity which is argued under the problem of definition. Thus, preventing the rigidity of definition describes the condition of separation of modernity from utopianism.

²⁴⁵ İnci Basa, 2015: 728.

4.2.8 Flexibility and Adaptability

The last quality of tolerance space regarded in this study is adaptability. Adaptability is a concept to refer *ability to react to change*. An open society is an evolving phenomenon through increasing perception and consciousness. The future will necessarily demand new spaces and requirements. In spatial terms, it corresponds to being able to respond to changing conditions and needs. Therefore, an unoccupied space should not only respond to the concept formed at the will of existing authority and their considerations as needs within a certain period but also be able to adapt to changes and conditions. Sıhhiye as a tolerance space offers a certain level of flexibility with the qualities of unoccupiability and adaptability to a place of protest. One of the crowded traffic crossroads in Ankara could become, a place of gathering for protest. Which is a unique aspect amongst squares of Ankara. However, Sıhhiye is today a fragmented place, through usurpation of pedestrian and urban rights by prioritizing vehicle traffic, fragmented by crowded and repetitive duplication of blocks without context as a result of accumulative profit-oriented private sector structures. Formal deterioration also resonates with the fragmentation of society. Thus, as a soothed interface, it is not possible to claim neither Sıhhiye nor any other public space on Ankara as truly an *adaptive space*. Nevertheless, it shows that it can produce adaptive public spaces with its parks and squares that are bearing the hints of civilization, even if they are faded.

The presence of adaptability in the social sphere will be discussed in two instances of architecture. The first one is the Turkish Heart. The earliest endeavor of the Republic of Turkey was to establish a nation-state. Although, it was not considered as an ideal, what is thought necessary to be able to create a resilient and consistent organization. Paralleled to this, Turkish Heart, designated to serve as an organizational building to the nationalist axis, to propagate a ground for Anatolian people to establish a common ground to become a nation. After that, the representation of space, which remained partially at a point of contradiction with

the open society project with Sıhhiye for the purpose to reach *modern civilization*, is adapted to become Ankara Painting and Sculpture Museum, with relatively surprising interior and varying atmospheres. It is suggested that the re-functioning from a relatively conservative, nationalist point to an art museum is made possible by the context of Sıhhiye.

As the last instance of this study, Cermodern (1926-27,2010) could represent an instance for both an artifact of architecture to sign both adaptability and multiplicity. Cermodern serves as the largest contemporary art center in Ankara as re-functioning from the railroad vehicle maintenance workshops.²⁴⁶ After 1990 due to the change in the railway destination, the building lost its original function and was congested in the urban fabric, as the leftover zone. In 1992 it is decided to demolish the maintenance workshops, but no actions were taken. Lately, in 1995, it was decided to transform the maintenance workshops into a contemporary art museum through a protection order.²⁴⁷ Although it is not considered to bear much architectural significance, it is regarded that, workshops do represent a value of memory as they are a product of the earlier railway establishment efforts in Turkey. This decision could resemble a result of Sıhhiye's context. The tolerance space should be capable to adapt and coexist rather than destruct.

Building through the demolition process²⁴⁸ is an indication of rigidity. In other words, *building through demolition* is a costly attempt of reshaping the environment for the places unable to adapt to changing conditions i.e., lack of

²⁴⁶ Gülseren Mungan Yavuztürk, Ankara'da Demiryolunun CerModern'e Uzanan Tarihi, 2017, Accessed (28 Feb 2021) <http://kentvedemiryolu.com/ankarada-demiryolunun-cermoderne-uzanan-tarihi/>

²⁴⁷ Seda Gök, CerModern, Tarihini İçinde Sanatı Yaşatıyor, 2014, Accessed (28 Feb 2021) <http://www.sedagok.com/?p=89>

²⁴⁸ Güven Arif Sargın, Yerli ve Milli Bir Frankenstein" Hikayesi: Kamu (TOKİ) İhaleleri [A 'Domestic and National' Frankenstein Story: Public (TOKİ) Tenders], 2020.

adaptability. The building was projected by Uygur architects in 2000 and opened in 2010. The new building was shaped with an understanding that it exhibits and remembers the machine workshop instead of hiding or forgetting it. Reallocation from workshop to Cermodern does not only provides a ground for an art center but through events, it accelerates an authenticity in the city experience of Ankara.



Figure 42. Cermodern. n.d.²⁴⁹

Cermodern and Ankara Painting and Sculpture Museum are spaces that once lost their function in the city; within the context of tolerance space, they have managed to adapt and bear a new function which they were not aware of through the quality of adaptability.

²⁴⁹ Cermodern (Periscopic Lens). Accessed (27 Feb 2021)
<https://i.imgur.com/8qgy9.jpg><http://www.mediaturizm.com/resimler/icerik/ankara-modern-sanatlar-merkezi.jpg>

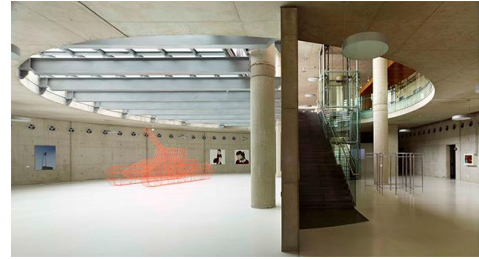


Figure 43. Cermodern before²⁵⁰ and after. n.d.²⁵¹



Figure 44. Cermodern Interior. n.d.²⁵²

²⁵⁰ Railway Maintenance Workshop. Accessed (27 Feb 2021)

<https://www.cermodern.org/hakkimizda.html>

²⁵¹ Cermodern Interior. Accessed (27 Feb 2021)

<https://www.uygurarchitects.com/img/projects/cer-modern/cer-modern-11.jpg>

²⁵² Cermodern Interior. Accessed (27 Feb 2021)

<https://www.uygurarchitects.com/img/projects/cer-modern/cer-modern-10.jpg>

CHAPTER 5

CONCLUSION

The world we live and produce is the projection of our imagination on reality. This phenomenon could be iterated over the theory of representation; each entity exists with its image on who experiences it. However, to be able to interact and communicate over things, we need an interface that is matching more or less on the same platform. Or in other words, images should be anchored to the same point to interact and explore. In semiotics, those relationships are articulated as the plane of content (signified) and the plane of expression (signifier).²⁵³ The sign, which is often argued as holistic interaction between two concepts is argued as a distinct concept in this study. The sign is regarded here as a model of representation, a pointer to refer to signified. It is merely a communication tool, between images. Our grasping level will improve the more the image created in our minds by representation models. Although there is no real connection between the sign and the signified, conception and communication increase along with the alignment of parallelity between an object and its images. Our understanding of the mechanics of natural sciences and presenting it through more accurate representational models made us possible to reach today's knowledge on natural sciences as well as technology. In a spatial sense, Lefebvre's triad parallels this articulation. the difference between the desired, designed, and implemented space increases, the space begins to decay its aesthetics, values, and rationality.

Henri Lefebvre and Richard Sennett's problematic descriptions regarding contradictions of the contemporary city constructed a base for the inquiry of this

²⁵³ Ferdinand de Saussure, 1916, 2011: 67-69.

study. The condition of the city is iterated over starting from simple-looking but complex questions to seek a possible rationale for the city. Those questions are, why does the city exist, how does the city exist, and who is the city for? Based on the axioms that the city is for society and that society is an organization, it has been inquired why the organization exists and how it progresses. The problem that frequently arises at this point is that the schemes that work as a survival mechanism do more harm than good if they are repeated in more complex artificial systems albeit they once were useful. This situation is called *the problem of the closed society* and it is discussed on parallel problems up to the historical patterns and the instinct-will problematic.

Upon the questions of what is the organization, who organize, what is the aim of the organization? The conception of the organization is interpreted through a variety of disciplines and scopes respectively, theory of evolution, theory of mutual aid, game theory, and modernity. Ultimately, a rationale for the organization is presented; the organization is regarded as the collective work of individuals to achieve mutual benefit. The organization aims to achieve a higher fraction of power and it is coherent unity of differences. The organization is more artificial than natural. If the organization is a devised model, is it possible to determine objective parameters that allow it to be rational or sustainable? Thus, these conditions are based following the axiom of the study built upon organization gains its legitimacy only when it is fair contribution-benefit (labor-income) balance. The second question is to what extent the cooperation with the different is possible? This inquiry revealed another indispensable parameter for an organization that is tolerance. Tolerance is regarded to be the parameter of acceptance of differences. Nevertheless, tolerance is not a discrete but continuous parameter of organization. What keeps the state of rationality in terms of expectations from the perspective of individuals within the organization? To understand and describe the rational or sustainable state of an organization, this study inspected the historical breakpoints and paradigm shifts where the major scope of organizations failed or changed.

Thereafter, it suggested that it is possible to recognize a pattern for multiple dichotomous extremities. Dichotomous extremities are a pair of concepts that are opposite to each other but whose existence could only be expressed in conjunction with the other. The scope of sustainability within the dichotomous extremities is eventually bonded to avoid both extremes. The argument introduced the concept of *the tolerance space*, which was the focus of the study.

Tolerance space, as a semi-ambiguous framework, is thought to be a structure that can detect excessive points on complex problems that cannot be resolved binary logical understanding. In other words, tolerance space is an abstract projection of a critical mechanism that can be applied to different problems. While the subject of the thesis focuses directly on the city, some parallel problematics are also included to examine the concept of tolerance space and dichotomic extremities. Since the conception of tolerance space is depicted on continuous and complex problems, it does attempt to answer questions through a binary approach. However, it describes clearly which situations will be out of tolerance. These limits are revealed again through historical patterns marked with concepts referring to modernity. At this point, starting from the problems of the city, the relationship between society and the city within a subject-object relationship has been examined from the perspective of the concept of tolerance space. This framework has been extended not only to articulate but critical mechanisms to inquiry social and spatial entities.

In historical patterns that cause paradigm shifts, this study argues the fundamental aim of the organization is to reach greater *freedom* through accumulating a higher fraction(s) of power. that the primary reason for an organization to lose its rationality is the deterioration of the contribution-benefit proportion (justice) through the intervention of a minor group (sub-organization) within the organization namely the closed society (i.e. tribe, cult). The second situation is when the organization refuses to increase organizational complexity, which will

evolve itself to a better version (*progression*). These parameters, theoretically, reflect the pillars to create a sustainable progressive organization (civilization) that is capable to override the cruelties of nature, providing justice and wealth to all, and extending the knowledge and capabilities of itself for further discoveries and inventions. Description of such society found its parallelity within the conceptualization of open society argued by Henri Bergson and Karl Popper. Upon the dialect of open and close on the society. Open society is a type of society neither bounded strict rules nor groups of people, it is open to change and extend. The regulation rules of the society are shaped through rationality, which commits protection in a way that the rules of any kind of closed society cannot interfere with. The open society is a societal pact where the principle of earned over innate is adopted; based upon justice and freedom aiming at inclusion and progression. It could be achieved through, as suggested by Jürgen Habermas, rational communication, education, and the rejection of dogmas. The idea of open society further developed to be represented on the object of society, the city. Eventually, the study argued how could the merits of an open society to be reflected as spatial qualities within the city, to reclaim its context. Within the scope of tolerance space, the abstract projections of freedom, justice, and progression scrutinized and attempted to be represented as tangible spatial qualities such as accessibility, porosity, anonymity, unoccupiability, flexibility, multiplicity, and adaptability.

Ankara appeared as one of the few established capitals after the industrial revolution and created itself out of nothing with the idea of an open society shaped through the paradigm of modernity in the era of the monarchic/semi-monarchic organization models are still dominant in the world. As a result of these factors, the non-consequential array of spaces in Ankara²⁵⁴ is one of the main factors in the decision of choosing the case of Sıhhiye in this work. The sole case study of this

²⁵⁴ Paraphrased from comments of Zeki Kamil Ülkenli during thesis defense. 04 Feb 2022.

study appears as the starting point of a project where a concept gives a name to the place. Sıhhiye District of Ankara is depicted as a place that is thought to provide qualities of tolerance space which is considered to be easy to unnoticed.

This study suggests, within the scope of the Lefebvrian triad, Sıhhiye's object-image-representation (conceived-perceived-lived) space has a consistent structure as it is there for the society. Yet, it is not aimed to portray Sıhhiye as an ideal designated space. Sıhhiye District is an urban space that could be considered very chaotic by many points.²⁵⁵ Conversely, it is fairly possible to have a more unpleasant experience rather than pleasant memories in today's conditions. However, this thesis argues, some unseen qualities justify Sıhhiye as tolerance space through qualities of information exchange, anonymity, engagement, communication, flexibility, adaptability, multiplicity, and opportunity of confrontation and raising a voice. Aspects that are considered to be problematic construct a ground that advances society. Sıhhiye as an interface, functions as a social condenser within the city, it mediates between, cultures, old and new, rich and poor, reason and emotion; it offers a possibility to improve and adapt with the tools and limits of modernity. Sıhhiye offers what pioneers should do for society, it offers a better projection for living in its time, it stands open for change and includes within the scope of tolerance space. However, it does not dictate a certain way of living, most obviously right to choose has been given to those who experience it. It should also be noted that the idea of Sıhhiye that is aiming to create a just and progressive society, have their share of being the target of autocratic upheavals in Turkey's complex history. This situation can be exemplified by the dismantling of important functions of Sıhhiye, the devouring the squares via highways, the suppression of the protest culture, and restriction/reduction of open

²⁵⁵ Noted by Zeki Kamil Ülkenli that Sıhhiye is often named as the twilight zone in Ankara by city planners, as it displays uncanny characteristics as a result of being a transition space. 04 Feb 2022

public spaces. However, in this study, this situation is not interpreted as the failure of the project Sıhhiye. Naturally, society and episteme are complex concepts that are not only determined by space. The spatial qualities and practices that are presented in this study are considered to be adequate to describe Sıhhiye Ankara as a successful example of tolerance space. Thus, in this study suggested, Sıhhiye formulates and organizes cause-effect relationships both socially and spatially, and as a result of this, the principles of Sıhhiye reflect a successful example of urban/architectural praxis.

Architecture is an art of creation that should not be concealed within the limits of form. Francesco Marullo states “*Architecture is a plan, a strategy of the organization to fulfill human actions. It is amoral: its indifference provides the conditions for life to occur. Success is not in what architecture is, but rather in what it is able to do*”.²⁵⁶ Ultimately, the study presents its open questions and final statements. What is the function of the architect within society? what should be the limits of autonomy for the designers of the built environment? In the last century, the role of architects evolved from servant of authority to pioneer of the society through merits of modernity. Yet it is arguable whether the architect fulfilled its intellectual responsibility against society. Bilsel argues:

The role of architecture in the new world order shaped by the global market economy is more clearly and visibly meeting the investors' profit-oriented, competitive expectations in the most effective way. The suburban “suburbia” projects, which exclude the City, the urban space and which emerged as an alternative to the City centers, use the latest architectural products – multi-purpose shopping malls, images created for popular

²⁵⁶ Francesco Marullo. Typical Plan: The Architecture of Labor and the Space of Production. 2014: Propositions V.

culture and imported style lifestyle aspirations. company buildings, high-priority office blocks competing with each other by trying to become symbols, etc., which are the primary design motif, are produced by architects and city designers on behalf of the “new world order” without question.²⁵⁷

At this point, in an endless production and consumption frenzy, in addition to an ongoing production whose quality is not questioned, the lack of critical mechanisms that control this production constitutes the main conclusion of this study. As Bilsel states:

We observe that critical stances are developing against the practices of urbanization and space production which are legitimized under the name of “changing world order” and “post-modern pluralism” in recent planning, urban design, and architectural literature.²⁵⁸ The public sphere and the public space paradigm are one of the focal points of this opposition.²⁵⁹

Parallel by Bilsel, this study claims that the spatial projection of critical mechanisms protects the reasoning of the city. It appears to be a necessity to protect the link, reasoning between ideal and the reality of the city. This conjuncture suggested that the role and the responsibility of the actors of the built environment should evolve beyond demanded solution makers to education, articulation, curation, and criticism with decision-making capacity. Accordingly,

²⁵⁷ Candaş Bilsel. *Urban Transformation, Dissolving Cities and Fragmented Public Space* [Kentsel Dönüşüm, Çözülen Kentler ve Parçalanmış Kamusal Alan]. 2016.

²⁵⁸ Matthew Pflaum. 2015: 384.

²⁵⁹ Candaş Bilsel. 2016.

along with the parallel discussions of *collaborative architecture*, *sustainability*, *flexible-adaptive housing*, *labor-income-time balance*, *architect/architecture as ...*, tolerance space offers a critical mechanism to inquiry the production of the built environment. The built environment is of an altered nature. The only legitimacy for this intervention is offering something more than what is existent. Congruently, justification for the alteration of nature could only be possible if it proposes a step for advancement.



REFERENCES

- Acemoğlu, D. and Robinson, J. A. *Inclusive and Extractive Institutions*, 2012. Accessed (18 Oct 2020) <https://rampages.us/wpnecon491/inclusive-and-extractive-institutions/>
- Adajian, Thomas. "The Definition of Art". In *Stanford Encyclopedia of Philosophy*. 2018. Accessed (14 Oct 2020) <https://plato.stanford.edu/entries/art-definition/>
- Adamchik, Victor. *Graph Theory*. 2005. Accessed (16 Oct 2020) https://web.cs.hacettepe.edu.tr/~bbm205/Reading/graphs_1_print.pdf
- Adanalı, Yaşar. *Blood Architecture*. 2014. Accessed (18 Oct 2020) <https://reclaimistanbul.wordpress.com/2014/06/02/blood-architecture/>
- Arendt, Hannah. *The Human Condition*. Chicago: University of Chicago Press. 1958.
- Aslanoğlu, İnci. "Modernizmin Tanımı, Sınırları, Erken Yirminci Yüzyıl Mimarlığında Farklı Tavrılar". *ODTÜ MFD* (8:1). 1988: 59-66.
- Banyan, Margaret E. "Tragedy of Commons". In *Encyclopedia Britannica*, n.d. Accessed (14 Dec 2021) <https://www.britannica.com/science/tragedy-of-the-commons>
- Barkan, Steven. *Social Problems: Continuity and Change*. 2012. Accessed (29 May 2020) <https://open.lib.umn.edu/socialproblems/chapter/14-3-problems-of-urban-life/>
- Basa, İnci. "From Praise to Condemnation: Ottoman Revivalism and the Production of Space in Early Republican Ankara". *Journal of Urban History* Vol. 41(4). 2015: 711-738.

Basa, İnci. "Transformation From Representational Space to Tolerance Space: The Juxtaposition of Ideal and Real in the Urban Public Area". *METU JFA*, 2018/1 (35:1). 2018: 221-241.

Basa, İnci. *Linguistic Discourse in Architecture*. (PhD diss, Middle East Technical University, Ankara). 2000.

Batuman, Bülent. "City profile: Ankara". *Cities* 31 (2013). 2011: 578-590.

Batuman, Bülent. "Imagination as Appropriation: Student Riots and the (Re)Claiming of Public Space". *Space and Culture* 6(3). 2003: 261-275.

Batuman, Bülent. "Everywhere is Taksim": in *The Politics of Public Space from Nation-Building to Neoliberal Islamism and Beyond*. 2015. Accessed (18 Oct 2020) <http://yoksis.bilkent.edu.tr/pdf/files/7909.pdf>

Ben-Habib, S., and Passerin d'Entrèves, M., eds. *Habermas and the Unfinished Project of Modernity: Critical Essays on The Philosophical Discourse of Modernity*. Massachusetts: MIT Press. 1997. Original work published in 1981.

Berleant, A. and Carlson, A., eds. "Multi-Sensoriness and the City" by Yrjö Sepänmaa. In *The Aesthetics of Human Environment*. Ontario, Plymouth: Broadview Press. 2006.

Bilsel, Cana. "Kentsel Dönüşüm, Çözülen Kentler ve Parçalanmış Kamusal Alan". *Mimarlık Dergisi* 327. 2016. Accessed (11 Feb 2021) <http://www.mimarlikdergisi.com/index.cfm?sayfa=mimarlik&DergiSayi=41&RecID=1014>

Blank, Andreas. "Why do new meanings occur? A cognitive typology of the motivations for lexical Semantic change". In *Andreas Blank, Peter Koch, eds. Historical Semantics and Cognition*. Berlin, New York: Mouton de Gruyter. 1999: 61–68.

Bloomberg, Naomi. "Linear Perspective". In *Encyclopedia Britannica*. 2015. Accessed (14 Oct 2020) <https://www.britannica.com/art/linear-perspective>

Bobek, Ernst. *Laïcité Vorgeschichte, Geschichte und Ausblick*. (PhD diss, University of Vienna, Vienna). 2008. Accessed (08 Feb 2021) <http://othes.univie.ac.at/902/>

Bordo, Susan. *The Flight to Objectivity: Essays on Cartesianism and Culture*. New York: State University of New York Press. 1987.

Bozdoğan, Sibel. *Modernism and Nation Building: Turkish Architectural Culture in the Early Republic*. Seattle, London: University of Washington Press. 2001.

Bravo, Luisa. "Open Spaces, Public Spaces, Publics, Open-minded Places". In *Researchgate*. 2013. doi: 10.6092/issn.2036-1602/3708

Brooks, Rob. *How tribal thinking has left us in a post-truth world*, n.d. Accessed (18 Oct 2020) <https://theconversation.com/how-tribal-thinking-has-left-us-in-a-post-truth-world-69486>

Cengizkan, Ali. "Türkiye için Modern ve Planlı bir Başkent Kurmak: Ankara 1920-1950". *Goethe Institute*. 2010. Accessed (30 Sep 2019) <http://www.goethe.de/ins/tr/ank/prj/urs/geb/sta/trindex.htm>

Cerdà, Ildefons. *General Theory of Urbanization*. Edited by Guallart Vicente. Translated by Graham Thomson. Institute for Advanced Architecture of Catalonia, New York: Actar Publishers. 2018. Original work published 1867.

Chu, Ted. *Human Purpose and Transhuman Potential: A Cosmic Vision of Our Future Evolution*. Origin Press. 2014.

Çınar Özdil, N., Vejre, H., Bilsel, F. C. "Emergence and Evolution of the Urban Public Open Spaces of Ankara within the Urban Development History: 1923 to Present". *Journal of Planning History*, Vol. 19(1) 2020: 26-51.

Cuvier, Georges. *The Animal Kingdom*. Cambridge: Cambridge University Press. 1817. doi: 10.1017/CBO9781139227018

Darwin, Charles. *On the Origin of Species by Means of Natural Selection, or the Preservation of Favoured Races in the Struggle for Life*. London: John Murray. 1997. Original work published in 1859.

De Cruz, Helen. "Religion and Science". In *Stanford Encyclopedia of Philosophy*. 2017. Accessed (13 Oct 2020) <https://plato.stanford.edu/entries/religion-science/>

De Lucia, Vito. "Semantics of Chaos: Modernity, Law and the Commons". *Pólemos*, Vol. 12, Issue. 2. 2018. doi: 10.1515/pol-2018-0022

Demirsoy, Ali. *Yaşamın Temel Kuralları Cilt : 1 Kısım : 1*. Ankara: Meteksan Yayınları. 2005.

Derrida, Jacques (interviewed by Eva Meyer, 1986). "Architecture where Desire can Live". In Kate Nesbitt, ed. *Theorizing a New Agenda for Architecture, An Anthology of Architectural Theory 1965 - 1995*. New York: Princeton Architectural Press. 1996: 142-149.

Descartes, René. *A Discourse of a Method For the well guiding of Reason, and the Discovery of Truth in the Sciences*. London: Thomas Newcomb. 2008. Original work published in 1637. Accessed (2 Dec 2021) <https://www.gutenberg.org/ebooks/25830>

Doxiadis, Constantinos A. *Ekistics: An Introduction to the Science of Human Settlements*. New York: Oxford University Press. 1968.

Durmaz, Mert. *Flexible Housing In The 21St Century: Three Contemporary Case Studies*. (Master diss, Middle East Technical University, Ankara). 2020.

Eisenman, Peter. "Aspects of Modernism Maison Dom-Ino And the Self Referential Design". *Opposition* 15-16. Spring 1979. Accessed (25 Oct 2020) <https://www.semanticscholar.org/paper/Aspects-of-Modernism-Maison-Dom-Ino-and-the-Sign-Li-n/dcca121c705dd3d90896d9d41e5e4d0b808f9aaf>

Elmacıoğlu, Lale. *1940'larda 20'ye yakın aşı üreten Türkiye nasıl ithalatçı konumuna geldi?*. 2020. Accessed (12 Feb 2021)

<https://www.indyturk.com/node/283221/>

Erdim, Burak. *From Germany to Japan and Turkey: Modernity, Locality, and Bruno Taut's Trans-national Details from 1933 to 1938*. 2007. Accessed (11 Feb 2021) <https://www.semanticscholar.org/paper/From-Germany-to-Japan-and-Turkey%3A-Modernity%2C-and-to-Erdim/4bb80ae98900ec7d53147191c1253c388b3b61f3>

Fotaki, M. and Prasad, A. "Questioning Neoliberal Capitalism and Economic Inequality in Business Schools". *Academy of Management Learning and Education*, 14(4). 2015. doi: 10.5465/amle.2014.0182. Accessed (18 Oct 2020) https://www.researchgate.net/publication/283198089_Questioning_Neoliberal_Capitalism_and_Economic_Inequality_in_Business_Schools

Foucault, Michel. *Discipline and Punish: The Birth of Prison*. Translated by Alan Sheridan. New York: Random House Inc. 1977. Original work published in 1975.

Foucault, Michel. *The Birth of the Clinic: An Archaeology of Medical Perception*. Translated by A. M. Sheridan. London, New York: The Routledge. 1989. Original Work Published in 1963.

Foucault, Michel. *The Order of Things: An Archeology of the Human Sciences*. London, New York: Routledge. 2002. Original work published in 1966.

Frampton, Kenneth. *Modern Architecture: A Critical History*. London: Thames and Hudson, 1980.

- Gehl, Jan. *Winning Back the Public Spaces*. 2004. Accessed (18 Oct 2020)
<https://www.publicspace.org/multimedia/-/post/winning-back-the-public-spaces>
- Gibbs, Jack P. "Definitions of Law and Empirical Questions". *Law & Society Review*, May 1968, Vol. 2, No. 3. 1968. Accessed (17 Oct 2020)
<https://www.jstor.org/stable/pdf/3052897.pdf?refreqid=excelsior%3Ac865f2e9ca8f1910560f7600832b079c>
- Glorfeld, Jef. *Clair Patterson helped us breathe freely*. 2020. Accessed (18 Oct 2020) <https://cosmosmagazine.com/earth/earth-sciences/clair-patterson-helped-us-breathe-freely/>
- Gök Seda, *CerModern, Tarihin İçinde Sanatı Yaşatıyor*. 2014. Accessed (28 Feb 2021) <http://www.sedagok.com/?p=89>
- Grove, Robert. *The Elbow Method*. 2017. Accessed (14 Oct 2020)
<https://bl.ocks.org/rpgove/0060ff3b656618e9136b>
- Güler, İlayda. *An Inquiry on the Architecture of Production: From Mills to Machine Landscapes*. (Master diss, Middle East Technical University, Ankara). 2021.
- Günay, Baykan. *Ankara Spatial History. AESOP 2012 Ankara*. 2012. Accessed (22 Aug 2021) https://crp.metu.edu.tr/en/system/files/ankara_spatial_history.pdf
- Gündüz Vassaf. Çivisi çıkmış bir dünyada yaşıyoruz - DW Türkçe. *Youtube [Video File]*. 2021. Accessed (9 Nov 2021) <https://youtu.be/ujfgSmFYuWM>
- Gurteen, David. *Tribal thinking Tribe before truth*. n.d. Accessed (18 Oct 2020)
<https://conversational-leadership.net/tribal-thinking/>
- Habermas, J., and Ben-Habib, S. "Modernity vs Postmodernity". *New German Critique*, No. 22, Special Issue on Modernism. Winter 1981: 3-14.

Habermas, J., Lennox S. and Lennox F. "The Public Sphere: An Encyclopedia Article." *German Critique*, No. 3. Autumn 1974: 49-55.

Habermas, Jürgen. Felsefeci ve sosyolog Jürgen Habermas, demokrasi ve toplum üzerine konuşuyor. *Youtube [Video File]*. n.d. Accessed (17 Oct 2020)
<https://youtu.be/zPJOOZ2Q-XQ?t=31>

Habermas, Jürgen. *Postmetaphysical Thinking: Philosophical Essays Studies in Contemporary German Social Thought*. Translated by William Mark Hohengarten. Cambridge, Massachusetts: MIT Press. 1992.

Habermas, Jürgen. *The Philosophical Discourse of Modernity*. Translated by Frederick Lawrance. Massachusetts: MIT Press, 1987. Original work published in 1985.

Habermas, Jürgen. *The Structural Transformation of the Public Sphere*. Translated by Thomas Burger. Massachusetts: MIT Press. 1962.

Halk Sağlığı Genel Müdürlüğü. *Türkiye'de Aşının Tarihçesi*. 2018. Accessed (12 Feb 2021) <https://asi.saglik.gov.tr/genel-bilgiler/33-asinin-tarihcesi>

Harvey, David. *Rebel Cities: From the Right to the City to the Urban Revolution*. London, New York: Verso. 2012.

Hertweck, F. and Marot, S. eds. *The City in the City - Berlin: A Green Archipelago*. Zurich: Lars Müller Publishers. 2013. Original work published in 1977.

Hughes, J. Quentin. *The Influence of Italian Mannerism Upon Maltese Architecture*. 1953. Accessed (14 Oct 2020)
[https://web.archive.org/web/20170314232116/http://melitensiawth.com/incoming/Index/Melita%20Historica/MH.01\(1952-55\)/MH.1\(1953\)2/orig05.pdf](https://web.archive.org/web/20170314232116/http://melitensiawth.com/incoming/Index/Melita%20Historica/MH.01(1952-55)/MH.1(1953)2/orig05.pdf)

International Labor Organization. *Social protection responses to the COVID-19 crisis: Country responses and policy considerations*. 2020. Accessed (20 Oct 2020) <https://www.social-protection.org/gimi/RessourcePDF.action?id=56044>

Jung, E.H., Engelberg, A., and Kesselheim A.S. *Do large pharma companies provide drug development innovation? Our analysis says no*. 2019. Accessed (23 Oct 2020) <https://www.statnews.com/2019/12/10/large-pharma-companies-provide-little-new-drug-development-innovation/>

Kant Immanuel. What is Enlightenment?. 1784. Accessed (18 Oct 2020) <http://www.columbia.edu/acis/ets/CCREAD/etscc/kant.html>

Kant, Immanuel. *The Critique Of Pure Reason*. Translated by J. M. D. Meiklejohn. 2003. Original work published in 1781. Accessed (2 Dec 2021) <https://www.gutenberg.org/ebooks/4280>

Kaufmann, Emil. *Architecture in the Age of Reason*. Harvard: Harvard University Press. 1955.

Kellner, Peter. "The Bitter Face-Off Between Keynesian Economics and Monetarism". In *Encyclopedia Britannica*. 2013. Accessed (18 Oct 2020) <https://www.britannica.com/topic/Bitter-Face-Off-Between-Keynesian-Economics-and-Monetarism-The-1905030>

Keynes, John Maynard. *The General Theory of Employment, Interest and Money*. London: Palgrave Macmillan. 1936. Accessed (19 Oct 2020) https://www.files.ethz.ch/isn/125515/1366_KeynesTheoryofEmployment.pdf

Kittler, Friedrich A. "The City Is a Medium". *New Literary History* 27, no. 4. 1996: 717-746.

Kılınç, Kıvanç. “Öncü Halk Sağlığı Projelerinin Kamusal Mekanı Olarak Sıhhiye”. In Güven Arif Sargın. ed. *Başkent Üzerine Mekan-Politik Tezler: Ankara’nın Kamusal Yüzleri*. İstanbul: İletişim Yayınları. 2002: 119-156.

Kleiner, Fred S. *Gardner's Art Through the Ages: A Concise Global History Third Edition*. Boston: Clark Baxter. 2013.

Knoll, M., and Stocker B. eds. *Nietzsche as Political Philosopher*. Berlin: De Gruyter. 2014. doi: 10.1515/9783110359459

Kolowich Cox, Lindsay. *The Engagement Ring Story: How De Beers Created a Multi-Billion Dollar Industry From the Ground Up*. 2014. Accessed (18 Oct 2020) <https://blog.hubspot.com/marketing/diamond-de-beers-marketing-campaign>

Dağlıoğlu Kömez, Esin. ”Karl Popper’s Architectural Legacy: An Intertextual Reading of Collage City”. *METU JFA*. 33/1. 2016: 113-116.

Kömez Dağlıoğlu, Esin. “Reclaiming Context: Between Autonomy and Engagement”. In Andrea Kahn, Carol J. Burns, eds. *Site Matters: Strategies for Uncertainty Through Planning and Design, 2nd Edition*. New York: Routledge. 2020.

Koolhaas, Rem. *Delirious New York: A Retrospective Manifesto for Manhattan*. New York: The Monacelli Press. 1994.

Kropotkin, Peter. *Mutual Aid: A Factor of Evolution*. Edited by Jonathan David, Jackson McClure. New York: Phillips & Company. 2017. Original work published in 1902.

Kuhn, Steven. "Prisoner's Dilemma". In *Stanford Encyclopedia of Philosophy*. 2019. Accessed (13 Oct 2020) <https://plato.stanford.edu/entries/prisoner-dilemma/>

Lanchester, Joseph. The Turkish Century | From Hittites to Atatürk. *Kraut, Youtube [Video File]*. 2020. Accessed (12 Dec 2020) <https://youtu.be/XgjiJHV8P0w>

Landsman, Keren. *Polio whack-a-mole*. 2013. Accessed (12 Feb 2021)

<https://aeon.co/essays/how-anti-vaxxers-fuel-the-spread-of-polio>

Langer, Suzanne K. *Feeling and Form: a theory of art developed from Philosophy in a New Key*. New York: Charles Scribner's Sons. 1953: 48-52. Accessed (20 Oct 2020)

https://monoskop.org/images/1/11/Langer_Susanne_K_Feeling_and_Form_A_Theory_of_Art.pdf

Larman, Craig. *Applying UML and Patterns. An Introduction to Object-Oriented Analysis and Design and Iterative Development, 3rd Edition*. Massachusetts, Boston: Addison Wesley Professional Press. 2004.

Le Corbusier. *Towards a New Architecture. Translated by Frederick Etchells from the thirteenth French edition*. New York: Dover Publications. 1986. Original work published in 1931. Accessed (6 Jan 2019)

https://monoskop.org/images/b/bf/Corbusier_Le_Towards_a_New_Architecture_n_o_OCR.pdf

Lefebvre, Henri. *The Production of Space*. Translated by Donald Nicholson-Smith. Oxford: Basil Blackwell Ltd. 1991. Original work published in 1974. Accessed (25 May 2020)

https://monoskop.org/images/7/75/Lefebvre_Henri_The_Production_of_Space.pdf

Levine, Saul. "The Location of Michelangelo's David: The Meeting of January 25, 1504". *The Art Bulletin* 56. 1974. Accessed (14 Oct 2020)

<https://www.tandfonline.com/doi/abs/10.1080/00043079.1974.10789836>

Martinez-Alfaro, H., Gomez-Garcia, S. Simulating Annealing. *In Sciencedirect*. 1998. Accessed (16 Oct 2020) <https://www.sciencedirect.com/topics/materials-science/simulated-annealing>

Marullo, Francesco. *Typical Plan: The Architecture of Labor and the Space of Production*. (PhD diss, TU Delft, Delft). 2014. Accessed (6 May 2019) <https://repository.tudelft.nl/islandora/object/uuid:5b7faa1f-a2a7-46e2-974d-7b77c13836f3>

McCarthy, John. *What Is Artificial Intelligence?*. 2007. Accessed (14 Oct 2020) <http://jmc.stanford.edu/articles/whatisai/whatisai.pdf>

McCoy, Evan. *The Time for Rainbow Capitalism Is Over*. 2020. Accessed (18 Oct 2020) <https://medium.com/better-marketing/the-time-for-rainbow-capitalism-is-over-57e88bf57581>

McKechnie, Alexander. *Misery Was. exurb1a, Youtube [Video File]*. 2019. Accessed (9 Nov 2020) https://www.youtube.com/watch?v=n_42UNlhyU

Medlife Crisis. *Should Knowledge Be Free?*. *Youtube [Video File]*. 2020. Accessed (7 Nov 2021) <https://youtu.be/PriwCi6SzLo>

Meisenzahl, Mary. *In diesen unscheinbaren Garagen wurden Amazon, Google, Apple und Co. gegründet*. 2019. Accessed (7 Nov 2021) <https://www.businessinsider.de/wirtschaft/in-diesen-unscheinbaren-garagen-wurden-amazon-google-apple-und-co-gegruendet/>

Meller, A., Ahmed, H. *How Big Pharma Reaps Profits While Hurting Everyday Americans*. 2019. Accessed (18 Oct 2020) <https://www.americanprogress.org/issues/democracy/reports/2019/08/30/473911/big-pharma-reaps-profits-hurting-everyday-americans/>

Miller, Martin A. "Peter Alekseyevich Kropotkin". In *Encyclopedia Britannica*. 1998, 2020. Accessed (13 Oct 2020) <https://www.britannica.com/biography/Peter-Alekseyevich-Kropotkin>

Ministère de l'Europe et des Affaires étrangères. "Liberty, Equality, Fraternity", n.d. Accessed (17 Oct 2020) <https://www.diplomatie.gouv.fr/>

Mitchell, William. "Representation". In Frank Lentricchia and Thomas McLaughlin eds. *Critical Terms for Literary Study*, 2nd Edition. Chicago: University of Chicago Press. 1995.

Morrow, Lisa. *Turkey's ancient tradition of 'paying it forward'*. 2019. Accessed (11 Feb 2021) <http://www.bbc.com/travel/story/20191125-turkeys-ancient-tradition-of-paying-it-forward>

Mungan Yavuztürk, Gülseren. *Ankara'da Demiryolunun CerModern'e Uzanan Tarihi*. 2017. Accessed (28 Feb 2021) <http://kentvedemiryolu.com/ankarada-demiryolunun-cermoderne-uzanan-tarihi/>

Nakamoto, Satoshi. *Bitcoin: A Peer-to-Peer Electronic Cash System*. 2008: 1-3. Accessed (18 Mar 2019) <https://bitcoin.org/bitcoin.pdf>

National Center For Biotechnology Information. *Artificial Selection, Or Adaptation To Human Demands*. 2009. Accessed (19 Oct 2020) <https://www.ncbi.nlm.nih.gov/books/NBK219732/>

Nesbitt, Kate. ed. *Theorizing A New Agenda For Architecture: An Anthology of Architectural Theory 1965-1995*. New York: Princeton Architectural Press. 1996.

Nietzsche, Friedrich. *Beyond Good and Evil*. 1886. Accessed (30 Sep 2019) <https://www.planetebook.com/free-ebooks/beyond-good-and-evil.pdf>

Nietzsche, Friedrich. *Thus Spoke Zarathustra*. 1885. Accessed (04 Oct 2020) <http://users.clas.ufl.edu/burt/LoserLit/zarathustra.pdf>

Notes from "Architecture and Discourse" lecture by Prof. Dr. İnci Basa, METU, January 2019.

Notes from “*City in Contemporary Architectural Theory*” lecture by Prof. Dr. Esin Kömez Dağlıoğlu, METU, January 2019.

Notes from comments by Prof. Dr. Zeki Kamil Ülkenli during Thesis Defense, METU, February 2022.

Notes from “*Different Modes of Representation*” lecture by Prof. Dr. Ayşen Savaş, METU, January 2019.

Notes from “*Object-Oriented Programming and Design*” lecture by Prof. Dr. Altan Koçyiğit, METU, January 2020.

Notes from “*Socio-Cultural Themes in Urban Architecture*” lecture by Prof. Dr. Cânâ Bilsel, METU, January 2019.

Oechslin, W., and Wang, W. "Les Cinq Points d'une Architecture Nouvelle". *Assemblage* No. 4. October 1987: 82-93. Accessed (23 Oct 2020)
<https://www.jstor.org/stable/3171037>

Özaloğlu, Serpil. "Sıhhiye Meydanı'ndan Sıhhiye Köprüsü'ne: Köprü'de Gündelik Hayat". *Dosya* 27. 2011: 70-78.

Pflaum, Matthew. “The Limitations of Reductive Wealth Redistribution Strategies for Curtailing Inequality in the Era of Global Capitalism”. *Journal of Politics and Political Economy* 2, no:3. September 2015: 383-399.

Pier Vittorio Aureli. *The Possibility of An Absolute Architecture*. Cambridge: MIT Press. 2011.

Plato. *Plato's The Republic*. Translated by Allan Bloom. New York: Basicbooks Inc. 1968. Original work published in 375 BCE. Accessed (14 Oct 2020)
<https://mvlindsey.files.wordpress.com/2015/08/allen-bloom-the-republic.pdf>

Popper, Karl Raimund. Karl Popper on Open Society. *Youtube [Video File]*. 1974. Accessed (24 Jun 2021) <https://youtu.be/YVnlzYfIAj0?t=132>

Popper, Karl Raimund. *The Logic of Scientific Discovery*. London, New York: Routledge. 2002b. Original Work Published in 1935.

Popper, Karl Raimund. *The Open Society And Its Enemies Complete: Volumes I and II Fifth Edition (Revised)*. Princeton: Princeton University Press. 2019. Original work published in 1945. Accessed (06 May 2019) https://monoskop.org/images/5/5f/Popper_Karl_The_Open_Society_and_Its_Enemies_Vols_1-2_5th_ed.pdf

Popper, Karl Raimund. *The Poverty of Historicism*. London, New York: Routledge. 2002a. Original Work Published in 1956.

Rapoport, Amos. *Human Aspect of Urban Form: Towards a Man Environment Approach to Urban Form and Design*. New York: Pergamon Press. 1977.

Ross, Don. "Game Theory". In *Stanford Encyclopedia of Philosophy*. 1997, 2019. Accessed (13 Oct 2020) <https://plato.stanford.edu/entries/game-theory/>

Rota, Kerim. *Barış ve Sinem'in orta direk olma hayali*. 2020. Accessed (18 Oct 2020) <https://www.paraanaliz.com/2020/ekonomi/kerim-rota-yazdi-baris-ve-sinemin-orta-direk-olma-hayali-50957/>

Ruf, Allen. Neoliberalism, the New Social Darwinism, and New Orleans. *Monthly Review Magazine*. 2005. Accessed (01 Jun 2020) <https://mronline.org/2005/09/08/neoliberalism-the-new-social-darwinism-and-new-orleans/#gsc.tab=0>

Russell, Bertrand. *A History of Western Philosophy*. London: George Allen & Unwin. 1945.

Şahin Burat, Esra. "Let the Stone Appear as Stone, Wood as Wood": Frank Lloyd Wright's Theory Of Materials. *METU JFA* 2012/1 (29:1). 2012: 321-338.

Accessed (3 Dec 2021)

<https://open.metu.edu.tr/bitstream/handle/11511/50868/321-338.pdf>

Sak, S., and Şenyapılı, B. "Evading Time and Place in Ankara: A Reading of Contemporary Urban Collective Memory Through Recent Transformations". *Space and Culture* 22/4. 2019: 341-356.

Sapkota, A. and Aryal, S. *17 Differences Between Natural and Artificial Selection*. 2020. Accessed (13 Oct 2020) <https://microbenotes.com/natural-vs-artificial-selection/>

Sargın, G. A. and Savaş, Ayşen. "A University is a society': an environmental history of the METU 'campus'". *Journal of Architecture*, 18:1, 2012: 79-106. doi: 10.1080/13602365.2012.751806

Sargın, Güven Arif. "Displaced memories, or the architecture of forgetting and remembrance". *Environment and Planning D: Society and Space*. volume 22. 2004: 659-680.

Sargın, Güven Arif. *Aklın Bir Anlık Durgunluğu [Blog entry]*. 2021. Accessed (8 Nov 2021) <https://gasmekan.wordpress.com/2021/07/01/aklin-bir-anlik-durgunlugu-aracsal-ve-elestirel-aklin-mutemadi-gerilimine-dair-notlar1/>

Sargın, Güven Arif. *Kapitalist Kentleşme ve İklim Krizi bir Sınıf Meselesidir...* [Blog entry]. 2021. Accessed (12 Dec 2021) <https://gasmekan.wordpress.com/2021/10/03/kapitalist-kentlesme-ve-iklim-krizi-bir-sinif-meselesidir/>

Sargın, Güven Arif. *Yerli ve Milli Bir Frankenstein Hikayesi: Kamu (TOKİ) İhaleleri* [Blog entry]. 2020. Accessed (28 Feb 2021)
<https://gasmekan.wordpress.com/2020/04/04/yerli-ve-milli-bir-frankenstein-hikayesi-kamu-toki-ihaleleri/>

Şengör, Celal. Teke Tek Özel - 3 Aralık 2017 "Coğrafi Keşifler" (Celal Şengör). *Youtube* [Video File]. 2017. Accessed (13 Feb 2021)
<https://youtu.be/jXiJVqxjGbc?t=1430>

Sennet, Richard. "The Public Realm". *The SAGE Handbook of the 21st Century City*. 2014. doi: 10.4135/9781526402059.n32

Sennett, Richard. GSD Talks: Richard Sennett, "The Open City". *Youtube* [Video File]. 2017. Accessed (24 Oct 2019) <https://youtu.be/7PoRrVqJ-FQ>

Shannon, Claude E. *A Symbolic Analysis of Relay and Switching Circuits*. (Master diss, Massachusetts Institute of Technology, Massachusetts). 1937.

Shapley, Lloyd S. *Notes on the n-Person Game -- II: The Value of an n-Person Game*. 1951. Accessed (2 Dec 2021)
https://www.rand.org/content/dam/rand/pubs/research_memoranda/2008/RM670.pdf

Siegel, Ethan. *This Is How, 100 Years Ago, A Solar Eclipse Proved Einstein Right And Newton Wrong*. 2019. Accessed (11 Feb 2021)
<https://www.forbes.com/sites/startswithabang/2019/05/29/this-is-how-100-years-ago-a-solar-eclipse-proved-einstein-right-and-newton-wrong/>

Şimşer, Duygu H. *Unfolding And Reframing Heterotopia Within The Context Of Peripheral Consumption Spaces*. (Master diss, Middle East Technical University, Ankara). 2017.

Smith et al. "Neoliberalism". In *Encyclopedia Britannica*. 2014, 2019. Accessed (18 Oct 2020) <https://www.britannica.com/topic/neoliberalism/additional-info#history>

South Seattle College. *Camera Obscura*. 2009. Accessed (16 Oct 2020) <https://canvas.southseattle.edu/courses/1798840/pages/lect-camera-obscura-to-1826-part-1>

Stone, Drew. *Anonymous Voting— A Design Survey*. 2019. Accessed (11 Feb 2021) <https://csrcl.huji.ac.il/people/Anonymous-Voting-Design-Survey>

Stoppard, Tom. *Dark Side*. *Dailymotion [Radio Play]*. 2013. Accessed (14 Dec 2021) <https://www.dailymotion.com/video/x14yvi7>

Tafuri, Manfredo. *Architecture and Utopia: Design and Capitalist Development*. Massachusetts: MIT Press. 1976.

Tankut, Gönül. "Ankara'nın Başkent Olma Süreci". *ODTÜ MFD*, 8:2. 1988: 93-104.

Taylor, Dianna. ed. *Michel Foucault: Key Concepts*. London: Routledge. 2011. doi: 10.4324/9781315711478

Tekin, Tuğba. *Transformation of An Urban "Vector": Eskişehir Highway, Ankara*. (Master diss, Middle East Technical University, Ankara). 2008.

Tobies, Renate A. *Iris Runge: A Life at the Crossroads of Mathematics, Science, and Industry*. Basel: Springer. 2012.

Tönnies, Ferdinand. *Community and Civil Society*. Edited by Jose Harris. Translated by Jose Harris & Margaret Hollis. Cambridge: Cambridge University Press. 2001. Original Work Published in 1887.

Torcello, Lawrance. 'Does not tyranny spring from democracy?' *How Plato's 380 BC philosophy is truer than ever today*. 2019. Accessed (18 Oct 2020)
<https://scroll.in/article/943564/does-not-tyranny-spring-from-democracy-how-platos-380-bc-philosophy-is-truer-than-ever-today>

Torodov, Lubomir. *Civilizational Thinking vs. Tribal Thinking*. 2017. Accessed (18 Oct 2020) <https://universalfuture.org/civilizational-thinking-versus-tribal-thinking-4e30b26393b4>

Trachtman, Paul. *A Brief History of Dada*. 2006. Accessed (18 Oct 2020)
<https://www.smithsonianmag.com/arts-culture/dada-115169154/>

Tschumi, Bernard. "Urban Pleasures and the Moral Good". *Assemblage*, December 1994, No. 25. Dec 1994: 6-13. Accessed (3 Dec 2021)
<https://www.jstor.org/stable/pdf/3171385.pdf>

Tschumi, Bernard. "Disjunctions". *Perspecta*. Vol 23. 1987: 108-119. Accessed (17 May 2019) <https://www.jstor.org/stable/1567111>

Turkel, Gerald. "Michel Foucault: Law, Power, and Knowledge". *Journal of Law and Society*, Vol. 17, No. 2. Summer 1990. Accessed (15 Oct 2020)
<https://www.jstor.org/stable/1410084>

University of Washington. *Bruno and Galileo in Rome*. 2005. Accessed (13 Oct 2020)
https://depts.washington.edu/hrome/Authors/pev42/BrunoandGalileoinRome/pub_zbarticle_view_printable.html

Veritasitum, How Imaginary Numbers Were Invented. *Youtube [Video File]*. 1 Nov 2021. Accessed (9 Nov 2021) <https://youtu.be/cUzklzVXJwo>

Vidler, Anthony. *Histories of the immediate present inventing architectural modernism 1930-1975*. (PhD diss, Delft University of Technology, Delft). 2005.

von Neumann, J. and Morgenstern, O. *Theory of Games and Economic Behavior*. Princeton: Princeton University Press. 1944.

Vox. Why South Africa is still so segregated. *Youtube [Video File]*. 2021. Accessed (7 Nov 2021) <https://youtu.be/NVH7JewfgJg>

Wagner, David. *Cake Cutting and Fair Division Algorithms*. 2008. Accessed (13 Oct 2020) <https://people.eecs.berkeley.edu/~daw/teaching/cs70-s08/notes/n8.pdf>

Wayman, Erin. Becoming Human: The Evolution of Walking Upright. *Smithsonian Magazine*. 2012. Accessed (20 May 2020) <https://www.smithsonianmag.com/science-nature/becoming-human-the-evolution-of-walking-upright-13837658/>

Weller, Chris. *Why Suburbs are Bad [Blog entry]*. 2016. Accessed (22 May 2020) <https://www.businessinsider.com/why-suburbs-are-bad-2016-9>

Wicander, R., and Monroe, J. S. *Historical Geology*. Massachusetts: Cengage Learning. 2012. Original work published in 1962.

Wiener, Norbert. *Cybernetics: Or Control and Communication in the Animal and the Machine*. Massachusetts: MIT Press. 1948.

World Health Organization. *Coronavirus disease (COVID-19): Herd immunity, lockdowns and COVID-19*. 2020. Accessed (8 Feb 2021) <https://www.who.int/news-room/q-a-detail/herd-immunity-lockdowns-and-covid-19>

Yong, Ed. *How the Pandemic Defeated America*. 2020. Accessed (12 Feb 2021) <https://www.theatlantic.com/magazine/archive/2020/09/coronavirus-american-failure/614191/>

Yücel, Eren Can. *Restructuring Urban Space Through City Hospitals*. (Master diss, Middle East Technical University, Ankara). 2020.

Zhang, Peng. "Black-box Models". In *Sciencedirect*. 2010. Accessed (13 Oct 2020)
<https://www.sciencedirect.com/topics/engineering/black-box-model>

Ziegler, Collin. *"Nathan Waddell Moonlighting: Beethoven And Literary Modernism"* New York: Oxford University Press, 2019 Pp. Xiv + 248, Isbn978 0 198 81670 6". *Eighteenth-Century Music*, Vol. 17, Issue. 2. 2020: 267-271. doi: 10.1017/S1478570620000160

"Caste". In *Encyclopedia Britannica*. 1998, 2021. Accessed (11 Feb 2021)
<https://www.britannica.com/topic/caste-social-differentiation>

"Comparative Anatomy". In *Encyclopedia Britannica*. 1998, 2020. Accessed (30 Mar 2020) <https://www.britannica.com/biography/Pierre-Belon>

"Euphemism". In *Cambridge Dictionary*. n.d. Accessed (18 Oct 2020)
<https://dictionary.cambridge.org/dictionary/english/euphemism>

"Freedom". In *Cambridge Dictionary*. n.d. Accessed (6 Nov 2021)
<https://dictionary.cambridge.org/dictionary/english/freedom>

"Indoctrination". In *Cambridge Dictionary*. n.d. Accessed (17 Oct 2020)
<https://dictionary.cambridge.org/dictionary/english/indoctrination>

"Law". In *Encyclopedia Britannica*. 1998, 2019. Accessed (23 Oct 2020)
<https://www.britannica.com/topic/law>

"Mens Rea". In Cornell Law School. n.d. Accessed (23 Oct 2020)
https://www.law.cornell.edu/wex/mens_rea

"Pierre Belon". In *Encyclopedia Britannica*. 1998. Accessed (30 Mar 2020)
<https://www.britannica.com/biography/Pierre-Belon>

"Polymorphism". In *Stackoverflow*. 2009. Accessed (7 Nov 2021)
<https://stackoverflow.com/questions/1031273/what-is-polymorphism-what-is-it-for-and-how-is-it-used>

"Red Pill". In *Cambridge Dictionary*. n.d. Accessed (13 Oct 2020)
<https://dictionary.cambridge.org/dictionary/english/red-pill>

"Shapley Value" In *Sciencedirect*. 2015. Accessed (6 Nov 2021)
<https://www.sciencedirect.com/topics/mathematics/shapley-value>

"Theodor Jost". *Goethe Institut Ankara*. 2010. Accessed (27 Feb 2021)
<https://www.goethe.de/ins/tr/ank/prj/urs/arc/jos/trindex.htm>

"What is India's caste system?". In *BBC*. 2019. Accessed (11 Feb 2021)
<https://www.bbc.com/news/world-asia-india-35650616>

3Blue1Brown, Visualizing quaternions (4d numbers) with stereographic projection.
Youtube [Video File]. 2018. Accessed (9 Nov 2021)
<https://youtu.be/d4EgbgTm0Bg>

APPENDICES

A. On the Concepts and Methods of Modernity

Rene Descartes proposed a concept that will evolve into a scientific method lately: the idea of rationality.²⁶⁰ The political outcome of the concept of objectivity is often hindered by its practice as a scientific method in today's episteme. However, it was important because it proposed a constant of logic rather than the dogmas by the authority or culture. Epistemologically, the truth was not a commodity of religious authorities anymore but something could be achieved through an individuals' mind. Through objectivity, each person could understand reproduce the constants upon life. This is the first step of *freethought*. Condition of *earned* became before *innate*. Descartes proposed a method that could be agreeable with universal constants. The key concept of modernity, that needs to be justified in universal arguments is logic. David Hume is the second name included in this study through contributions to the development of modernity. The implementation of objectivity is not an easy task in reality. Occurring events are affected by countless parameters which are not always easy to perceive or determine. If we only try to move within the range of parameters we could understand and measure, we would ignore many other criteria that are obscure but existent which eventually will lead us to *parameter bigotry*. In other words, ignoring the obscure parameters does not fit within the framework of objectivity. He highlights the art through the way of progression.²⁶¹ Interpretation of this study on why people leave rationality even if it realizes the condition of fairness, could be considered in given binary thinking which also applied to the rigidification of rationality. Hume's *skepticism* over objectivity, religion, society, and character was the indication of criticism.

²⁶⁰ René Descartes, 1637: Part IV-Part V.

²⁶¹ Bertrand Russel, A History of Western Philosophy, 1945: 491-495.

The last name in this part to be mentioned is Immanuel Kant, similar to David Hume, one of the main axioms of Kant was that humans are not truly free from their instincts. Therefore, Kant was not optimistic about human nature, as he thought they are prone to corruption. Which was contradictorily different from our endeavor of creating a better existence. Thus he suggested life is a struggle between better selves which might not result in direct benefit to individual and passion.²⁶² Religion, a flawed attempt to manage this organizational complexity and maintain its perpetuity was accumulated through discretion the concept of good and evil.²⁶³ According to Kant religion was a product of tribal authoritarian sectarianism. He suggested conquest to the ideal should be derived from life itself. He attempted to devise logical constants that could emerge what religion imperfectly attempted to do. Kantian way of reaching this ideal was criticism as a constant inquiry of inner and outer world to reach the better. Liberation from the cruelties of existence itself. As Greenberg asserts:

I identify Modernism with the intensification, almost this exacerbation, of this self-critical tendency that began with the philosopher Kant. Because he was the first to criticize the means itself of criticism, I conceive of Kant as the first real Modernist.²⁶⁴

Eventually, to evaluate the actions of change, or system suggestions for the society it is suggested to use modernity as a critical framework. By *modernity*, it is suggested three-dimension for criticism that is freethought justice, and progression. Those ideas are derived from the frameworks of rationality and skepticism.

²⁶² Immanuel Kant, What is enlightenment?, 1784.

²⁶³ Immanuel Kant, The Critique of Pure Reason, 1781: Section III. System of Transcendental Ideas.

²⁶⁴ Clement Greenberg, 1960, as cited in Anthony Vidler, 2005: 22.

On another aspect, Friedrich Kittler highlights Leonhard Euler as one of the key names to be mentioned in the paradigm of modernity.^{265 266}

Euler was a prolific mathematician yet was not a figure that produced a discourse of himself. However, according to Kittler through his works, Euler provided an allegorical example of the pillars of the paradigm of modernity.²⁶⁷ Kittler examples the graph theory devised by Euler to solve bridges of the Königsberg problem. Königsberg is a city consisting of two islands sitting inside a Pregel River, one of the islands is linked with four bridges, two on each side of the river. The smaller island has one on each side and there is another bridge linking the two islands to each other. The bridge problem was to argue whether it is possible to travel the city by using all bridges without using any bridge twice.

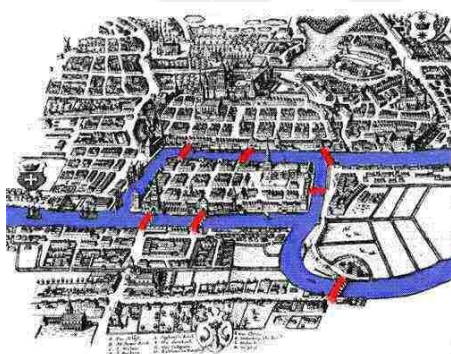


Figure 45. Bridges of Königsberg.
268

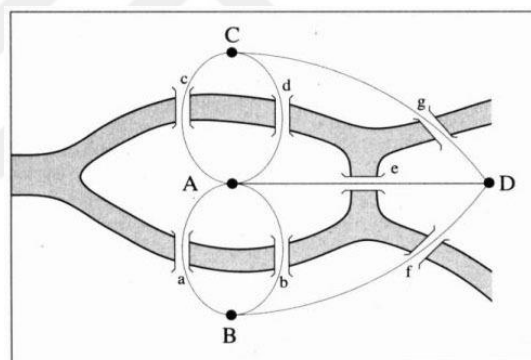


Figure 46. Euler's graph. ²⁶⁹

²⁶⁵ Friedrich A. Kittler, *The City is a Medium*, 1996.

²⁶⁶ See Appendix A: Method of Abstraction.

²⁶⁷ Victor Adamchik, *Graph Theory*, 2005.

²⁶⁸ Bridges of Königsberg. Accessed (25 Oct 2020)

https://www.maa.org/sites/default/files/images/cms_upload/Konigsberg_colour37936.jpg

²⁶⁹ Euler's Graph. Accessed (25 Oct 2020)

<https://maffsisphun.files.wordpress.com/2018/02/konigsberg-bridge-problem-graph-and-image.jpg?w=503>

Euler thought that there were too many irrelevant parameters that are blurring the essence of the problem. He represented the relevant elements of the problem and proposed bridges as links and each disconnected piece of land as nodes. He ended up with a graph, that represents neither lands nor bridges in terms of their physical qualities. Yet, through proposing a high-level abstraction, Euler reduced the problem to a basic level in a way anyone could solve. The graph theory is used today to solve complex mathematical problems, comprehensive imagination, topological, deep and thick mapping applications. Today, mapping of subway networks could represent a frequently encountered application of graph theory.

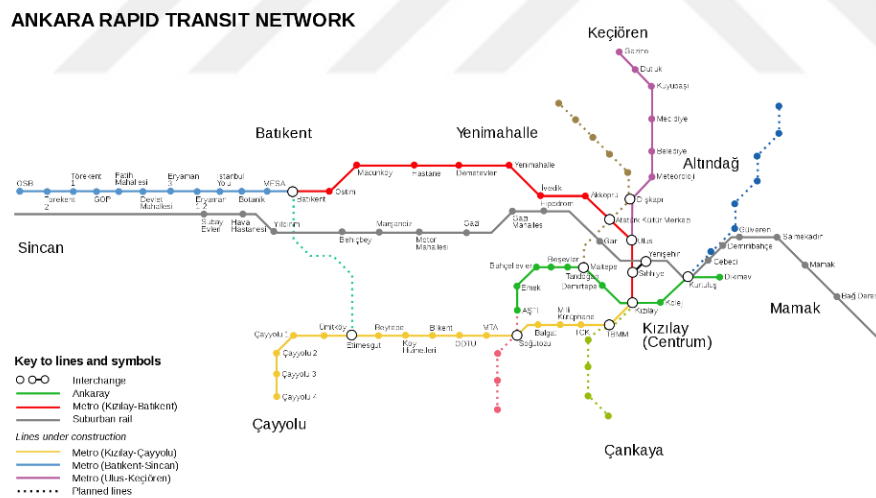


Figure 47. Subway Mappings are typical usage of graph theory.²⁷⁰

²⁷⁰ Ankara Subway Mapping. Accessed (27 Oct 2020) <https://mapa-metro.com/mapas/Ankara/mapa-metro-ankara.png>

Euler's contribution could be better understood through the analogical exemplification of camera obscura. Camera obscura is a simple setup of the darkroom getting light inside from pinpoint to project outer image inside the room through light. In the bright daylight, we are surrounded by an abundance wave of lights. The light is there and visible but the abundance and complexity blind us from seeing its behavior. Camera Obscura in a way is a method of abstracting light beams through relatively controlling them. In-camera Obscura, the direction of light is distinct from the darker parts of the rooms. It indicates the movement of the light. And, the projection of the outside world provides that light can bear image.²⁷¹ Euler was the one who names and conceptualizes the methods of high-level abstraction and representation which are the success points of human organization. Abstraction and representation methods are the primary tools of modernity to evaluate the attempt of change in terms of its constants.

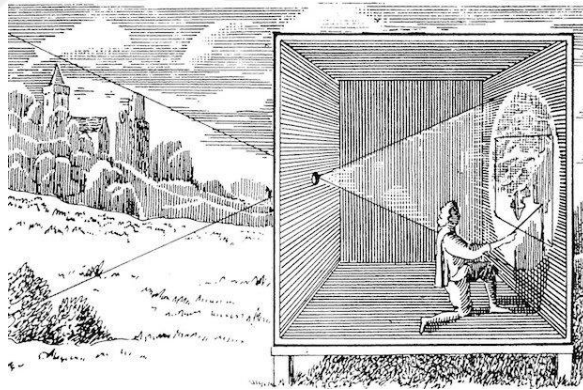


Figure 48. Camera Obscura.²⁷²

²⁷¹ South Seattle Collage, Camera Obscura, 2009.

²⁷² Camera Obscura. Accessed (25 Oct 2020)

<https://www.thedarkroom.it/inthedarkroom/wp-content/uploads/2014/10/Old-Camera-Obscura-Draw-620x413.jpg>

B. Examples of the Enigma of Modernity



Figure 49. Michaelangelo, David. 1501-4.²⁷³

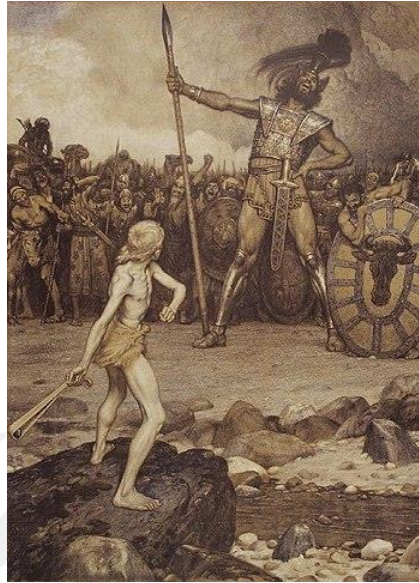


Figure 50. Osmar Schindler, David and Goliath. 1888.²⁷⁴

Perspective was invented as an indication of observation as reality constant, respectively, innately strong holy figures reduced in the hierarchy of paintings.²⁷⁵ Art stripped off to a certain degree of indoctrination of authority, veiling replaced with nudity of figures. David of Michaelangelo bears the symbolism of rebellion against the absolute authority of a relatively weak character standing against a much more strong imperious giant.²⁷⁶

²⁷³ Osmar Schindler, David and Goliath, 1888. Accessed (27 Oct 2020)
https://upload.wikimedia.org/wikipedia/commons/thumb/2/24/%27David%27_by_Michaelangelo_JBU0001.JPG/800px-%27David%27_by_Michaelangelo_JBU0001.JPG

²⁷⁴ Michaelangelo, David and Goliath, 1501-1504. Accessed (27 Oct 2020)
https://upload.wikimedia.org/wikipedia/commons/thumb/4/48/Osmar_Schindler_David_und_Goliath.jpg/350px-Osmar_Schindler_David_und_Goliath.jpg

²⁷⁵ Naomi Bloomberg, Linear Perspective, 2015.

²⁷⁶ Saul Levine, 1974: The Location of Michelangelo's David: The Meeting of January 25, 1504.

C. Sıhhiye as Place of Demand

Date	Title
2001	Global Action Day of Labor ²⁷⁷
2005	TMMOB Meeting ²⁷⁸
2008	Independence and Secularism Meeting ²⁷⁹
2010	Democracy and Rights Meeting for Bread, Peace, Freedom ²⁸⁰
2012	Equal Citizenship Meeting ²⁸¹
2014	Freedom, Peace, Democracy, Justice and Labor Meeting ²⁸²
2015	Labor, Peace and Democracy Meeting ²⁸³
2016	Abdi İpekci Park Meeting Prohibition ²⁸⁴
2020	Multi-Bar Association' Opposition Meeting ²⁸⁵

Table 1. Sıhhiye as a place of demand in various newspaper entries.

²⁷⁷ Hürriyet, 2001, Accessed (27 Feb 2021) <https://www.hurriyet.com.tr/gundem/ankarada-eylem-gunu-36129>

²⁷⁸ Selahattin Ekremoğlu, 2005, Accessed (27 Feb 2021) <https://www.tmmob.org.tr/icerik/tmmob-mitingi-ile-ilgili-yasal-izin-alindi-miting-ankara-Sıhhiye-meydaninda-yapilacak-0>

²⁷⁹ Zehra Şahindokuyucu, 2008, Birgün, Accessed (27 Feb 2021) <https://www.birgun.net/haber/Sıhhiye-de-meclis-e-meydan-okundu-38781>

²⁸⁰ Cumhuriyet, 2010, Accessed (27 Feb 2021) <https://www.cumhuriyet.com.tr/haber/turk-isin-buyuk-mitingi-yarin-113160>

²⁸¹ Sözcü, 2012, Accessed (27 Feb 2021) <https://www.sozcu.com.tr/2012/gundem/ankarada-tarihi-gun-71384/>

²⁸² Ünal Aydın, 2014, Hürriyet, Accessed (27 Feb 2021) <https://www.hurriyet.com.tr/ankara-da-miting-nedeniyle-yollar-kapanacak-25538681>

²⁸³ TMMOB Chamber of Civil Engineers, 2015, Accessed (27 Feb 2021) https://www.imo.org.tr/genel/bizden_detay.php?kod=13757&tipi=2&sube=0

²⁸⁴ Hürriyet, 2016, Accessed (27 Feb 2021) <https://www.hurriyet.com.tr/abdi-ipekci-parkina-eylem-yasagi-getirildi-40241888>

²⁸⁵ Milliyet, 2020, Accessed (27 Feb 2021) <https://www.milliyet.com.tr/siyaset/eylemler-devam-etti-6251049>

D. CSO Concert Hall



Figure 51. CSO Concert Hall (Old). n.d.²⁸⁶



Figure 52. CSO Concert Hall (New) By Uygur Architects. 2021.²⁸⁷



Figure 53. CSO Concert Hall (New) By Uygur Architects. 2021.²⁸⁸

²⁸⁶ CSO Concert Hall (Old) Accessed (27 Dec 2021)

https://upload.wikimedia.org/wikipedia/commons/4/41/Presidential_Symphony_Orchestra_Concert_Hall%2C_Ankara_%2812984871064%29.jpg

²⁸⁷ Photograph by Mehmet Ali Coşkun.

²⁸⁸ Photograph by Mehmet Ali Coşkun.