# RE-THINKING SPACE WITHIN THE FRAMEWORK OF BAUDRILLARD'S DEATH OF REALITY THEORY

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At last, this thesis is dedicated to the most gorgeous man I know, to my husband.

…to Yılmaz

# ABSTRACT


## RE-THINKING SPACE WITHIN THE FRAMEWORK OF BAUDRILLARD'S DEATH OF REALITY THEORY

This syudy, focuses on the reality of space and Baudrillard's theory of loss of reality. In the thesis, the historical breakpoints of architectural space approaches, the relationship established with today's virtual reality through different definitions and approaches of space in architectural literature has been questioned through the main pioners in this field. In this context, the aim of the thesis is to examine the realities of space based on the definitions of the contemporary mind set and to reinterpret the hyper reality of architectural space through the post-truth approach which is thought to be the new world view of the age.

In this direction, the first part of the thesis is devoted to the introduction of the purpose, scope and method of the thesis, and in the second part, the literature review of the concept of architectural space is presented under the titles of Ancient Period, Enlightenment Period, Modernity and Contemporary approaches. The third part of the thesis presents three main breakpoints that determine the scope of the study and forms the theoretical background. In this section, Descartes' understanding of Cartesian space, Heidegger's understanding of space as an area of experience, and finally Baudrillard's theory of loss of reality, which constitutes the main motivation of the thesis, are discussed in the focus of how they define space and the reality of space. Case study the fourth chapter of the thesis is analyzed in Do Ho Suh's Home within Home within Home, which provides a potential analysis for this and similar questioning by re-reading the ‘home within home through three breaking points which are: Cartesian structure of the physical integrity of the space, space as an area of experience and the theory of loss of reality by Baudrillard. The hypothesis of space as the main premise of the thesis and posttruth theory is presented as a new architectural reality.

The final chapter, which is the last and fifth part of the thesis, re-interprets the reality of today's virtual space with a holistic approach and presents a perspective on the realism of the posttruth era with reference to space and space reality approaches in the literature.

# ÖZET


## BAUDRILLARD'IN GERÇEKLİĞİN YİTİMİ TEORİSİ ÇERÇEVESİNDE MEKANIN YENİDEN DEĞERLENDİRİLMESİ

Mekânın gerçekliği ve Baudrillard'ın gerçekliğin yitimi teorisi üzerine şekillenen bu tez çalışması, mimarinin temel araştırma konularından biri olan mimari mekânın gerçeklik kavramı ile ilişkisine odaklanmıştır. Mekânın, mimari literatürdeki değişen tanımları üzerinden bugünün sanal gerçekliği ile kurulan ilişki, mimari mekânın tarihsel kırılma noktalarına referans vermek suretiyle ele alınarak, mekânın bugünün dünyasının tanımladığı gerçekliği bu alandaki temel düşünürler üzerinden sorgulanmıştır. Bu bağlamda tezin amacı, mekânın gerçekliğini değişen tanımlar üzerinden incelemek ve çağın 'yeni' dünya görüşü olduğu düşünülen 'post-truth' yaklaşımı üzerinden mimari mekânın hiper gerçekliğini yeniden yorumlamaktır.

Bu doğrultuda mimari mekân kavramının literatür taraması histeriografik bir yaklaşımla Antik Dönem, Aydınlanma Dönemi, Modernite ve Çağdaş yaklaşımlar başlıklarıyla sunulmuştur. Bu yaklaşımlar sonucunda saptanan, çalışmanın kapsamını da belirleyen ve teorik alt yapıyı oluşturan üç temel yaklaşım; Descartes'in Kartezyen mekân anlayışı, Heidgger'in bir deneyim alanı olarak mekân anlayışı ve tezin ana odak noktasını oluşturan Baudrillard'ın gerçekliğin yitimi teorisinin mekânı ve mekânın gerçekliğini nasıl tanımladıkları bağlamında ele alınmıştır.

Tezin vaka alanı incelemesi ise, temelde sözü edilen amaçla kurgulanmamış olsa da bu ve benzeri bir sorgulama için potansiyel teşkil eden Do Ho Suh'nun 'Home within Home within Home…' sergisi analiz edilmiştir. Sanatçının üretimi, mekanın üç kırılma noktası olan; Kartezyen yapısı, Heideggerci deneyimsel yapısı ve Baudrillard'ın gerçekliğin yitimi teorisi bağlamlarında tekrar okunmuştur.

Tezin sonuç bölümü, mimari literatürdeki değişen tanımları ile ele alınan mekânın gerçekliği yaklaşımları referansıyla belirlenmiş olan, temel üç yaklaşım üzerinden bugünün sanal mekânının gerçekliğini bütüncül bir ele alış ile 'gerçekliğin yitimi' yaklaşımı çerçevesinde mekânın gerçekliği ile ilgili farklı bir bakış açısı ortaya koymaktadır.

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| | |
|---|---|
| HWH | Home Within Home |
| HWHWHWHWH | Home Within Home Within Home Within Home Within Home |
| MMCA | National Museum of Modern and Contemporary Art |
| USA | United States of America |

# 1. INTRODUCTION

Within a wide range of research topics ranging from mathematics to philosophy, from psychology to physics, the ways of each discipline to define and examine the concept of space differ from each other. On the other hand, in architecture the definition and design of space expresses a holistic concept that depends on human factor as well as a physical integrity although space is considered differently from other disciplines because of its containing life and belonging. For this reason, the theoretical and design approaches developed on architectural space are diversified with different methods and thinking systems and shaped by variable parameters depending on the spirit of time.

Although different approaches to architectural space, which will be discussed in this thesis, constitute a field of knowledge about the history of space research, it is seen that some other concerns and parameters have arisen in addressing the architectural space in the early 21st century. Virtual reality and hyper reality concepts, which are one of the new research topics of social sciences as well as positive sciences, have entered into the field of architecture with the effect of research and experiments developed in this field. When these researches and discussions are examined, it is seen that the reality of architectural space and the concepts of virtual space and hyper-reality -as will be introduced later in the thesis- remain within the scope of informatics studies in architecture, and the theoretical approaches in this field are still the subject of discussion in architectural literature. Therefore, this thesis, unlike other studies, aimed to make a theoretical questioning of the hyper reality of space in architecture by taking Jean Baudrillard's theory of death of reality as a reference.

In this thesis, firstly the approaches developed on the reality of architectural space are examined. The scope of the thesis was analyzed by limiting it to three basic approaches in the context of Descartes-based Cartesian thought, experiential space developed under the leadership of Heidegger and death of reality theory put forward by Baudrillard. As a result of these analyzes, Do Ho Suh's ‘Home within Home within Home’ exhibition, which was taken as a case field, was re-read through these three fundamental break periods developed on the reality of architectural space. In this context, the reality of the ‘space’ with theoretical information and case analysis, within the framework of Baudrillard's ‘death of reality’ theory, the ‘post-truth’ approach, which is being discussed extensively in the field of social

sciences, has been questioned over the space and the hyper-reality of the space has been questioned within the framework of a new theoretical approach.

## 1.1. AIM OF THE THESIS

The search for the definition of the concept of space in architecture has been discussed with different approaches in different periods and it is still one of the main problematic of architecture. The debates of space from ancient Greece to the present day have taken place within the discipline of architecture as a physical and bodily holistic field of life as an indication that architecture cannot be considered as an act of construction only.

The focus of many differentiating views on the concept of space is the reality of space, which essentially covers an area of existence and the need to define it. The concept of reality defined in the ontological field, the reality of the space explained by numbers depending on the (a priori) object which is assumed to exist spontaneously, the absolute reality of the spatial space connected to the human act with Cartesian approach, the reality of the space created by the subject and event, The theory of hyper-reality debates, presents various problematics of space starting from ancient times to the present day.

The simulation approach, which is also called by some thinkers as the present period, enables discussions of virtuality in architecture. However, with the last approach called ‘simulation age’, the reality of space becomes questionable. Although this situation has been defined through different discourses, it extends the boundaries of the concept of space, which is discussed on the basis of concepts of ‘being’ or ‘existing’, and gives a new dimension to the definition of space.

The aim of this thesis is to re-discuss the virtual reality of space through the ontological approaches after the ‘post-truth’ approach and to question the ‘reality of virtual space’. In this context, the Baudrillard's ‘death of reality’ is the fundamental of this discussion and the theoretical background of the thesis is based on this approach. For this purpose, this thesis aims to discuss the following research questions;

- What is the current focus of space and reality discussions?
- How has the relationship between the reality of space and ontology influenced the concept of space in architecture, and who are the main actors of this relationship?

- How is space defined in the context of Baudrillard's theory of death of reality?
- In architecture, what are the potentials of the relationship established between the concept of post-truth and space, and how do these potentials affect the reality of architectural space?

In this thesis, which is progressing within the framework of these questions, the aim is to reach a possible definition of architectural reality through hyper-reality by discussing the ‘new virtual reality, a Cartesian absence-cognitive entity, of the architectural space as a field of existence.

## 1.2. SCOPE OF THE THESIS

In this thesis, the architectural space is primarily considered as an ontological field and the historical development and definitions of the space are examined with an existential approach. Spatial debates in architecture: a wide range of study areas such as epistemology, conceptual ontology, production of space, and approaches to these study areas. Researching the ontological and epistemological contexts of any concept necessitates research with different methods. This thesis focuses on the concept of reality associated with being, and therefore ontologically debates on the reality of space. Therefore, in the thesis study, epistemology with a broader definition of space and epistemological and phenomenological approaches in this context are excluded.

In the second part of the thesis, literature research has been carried out within the framework of the ideas developed on the ontological structure of the space starting from Ancient Greece under the titles of ‘Space in Enlightenment Era’, ‘Space in Moder Era’ and ‘Space in Contemporary World’. This literature survey, which covers a very wide period of time, mainly focuses on the change of the ontological definition of space and its effects on architectural space. For this reason, the periods and / or movements mentioned in the thesis are used to reveal the understanding of ontological space which changes with the name of the period in question rather than an architectural understanding and production styles.

In the third part of the thesis, while the relationship between space and reality is discussed, it is determined that there are breaking points in the ontological structure of the space produced from Ancient Greek to the present day. These breakpoints have been examined by

focusing on the existence and reality of architectural space within the framework of ontological approaches to space defined as ‘Cartesian thought’, ‘Experience’ and ‘Death of Reality’. The concept of hyper reality, which Baudrillard devised after the death of reality theory developed in the 1980s, introducing a new direction on the debates of virtuality in architecture, can be defined as a danger to the ontological space understanding of modern western societies. This approach has been seen as a productive basis for the arguments of the thesis on the reality of the existence-cognitive, Cartesian-virtual space. In this context, together with Baudrillard, Cartesian space concept he referred to, Heidegger’s experiential space concept he opposed and Lefevbre’s virtual space theories were examined and these concepts of space were compared in the context of ‘hyper reality’ concept via post-truth theory. This comparison is designed as a search for answers to one of the main questions of the thesis: how the relationship between the reality of space and ontology influenced the concept of space in architecture and who the main actors of this relationship are. The main actors are identified as Descartes (Cartesian space), Heidegger (experiential space) and as Baudrillard (hyper real space) based on these two approaches.

As the case study of the thesis, Do Ho Suh's ‘Home within Home within Home…’ artwork has been examined, which is thought to be able to open up all these ontological conceptions of space to discussion. This exhibition, set out with the idea that the artist virtually overlaps his house in South Korea with the place he lives in America, is realized in different museum spaces, primarily against the specific spatial structure of the Cartesian space, while Baudrillard's theories of simulation and loss of reality over virtuality and open up the experiential field of the space for discussion. The surreal space that emerged with this installation provided the opportunity to discuss all the ontological theories of space within the scope of the thesis as well as to question the reality of the space today and enabled the space to be discussed on a concrete ground.

## 1.3. METHODOLOGY OF THESIS

This thesis aims to question the reality of space and the reality of space within the framework of new approaches presented by discussions of virtuality in architecture. The reality of the space has been examined with an ontological approach by qualitative research method. In addition to (qualitative) research which constitutes the main method of the thesis,

chronological and historical background and interpreative methodology are used in the conclusion section.

After examining the literature researches of the thesis, starting from the discussions about the origins of the space, the definitions that differ according to the periods and approaches over the reality of the space are tabulated as a string. In the table, a new model has been developed by evaluating the different approaches identified within the scope of the thesis, Cartesian space, experiential space and the loss of reality in space.

As a result of the model developed, the case study examined through different breakpoints developed within the scope of the thesis, the Do 'Within Home Within Home Within Home…' exhibition was firstly introduced through the purpose and method, and then the response at the determined three breakpoints was discussed in the context of spatial approaches. The data of these three approaches, which break the ontological reality of the space, are presented by following different methods over the case field.

In this context;

- For the Cartesian definition of the space, the application of the exhibition as the primary source in different museum spaces was examined through the information and photographs in the exhibition. In this stage, the expressions of the artist and the curators of the exhibition were used as secondary sources.
- As the primary source for the experiential definition of the place, the comments of the users browsing the place on the internet and social media were discussed. In order to understand the changing experiential structure of the space, the statements of the artist and the exhibition curators were used as a secondary source and Heidegger's views on the ontological reality of the space were tested.
- For the hyper reality of space, the perception of space reality which is formed by the combination of the first two approaches is re-discussed through Baudrillard's theory of Simulation and Death of Reality, and the post-truth approach is taken over the intersection points and the hypothesis of the reality of space which is the result of the thesis is formed.

# 2. DISCUSSION ON THE CONCEPT OF SPACE

> Space is an abstract and hollow pattern in which things are objectified and transformed into paintings and numbers in a new language world [1].

The concept of space, which is the focal point of different disciplines, has been the subject of discussion of fields such as art, philosophy, aesthetics, physics and social sciences throughout history. The focus of the discussions is on questions such as ‘What is space?’, ‘Where is space?’. In this section, after explaining the origins and meanings of the concept of space in order to understand the basic problematic of architecture, the meaning of the concept of space in the period starting from Ancient Greece until today is examined chronologically.

## 2.1. ORIGINS OF SPACE

The concept of space, which is used as space and place in English, is conceptualized as something that can contain an object and contains all the existing ones [2]. The origins of the concept of space associated with the words space and place can also be associated with ‘space‘. The place we use in the Turkish language is of Arabic origin and is derived from the infinitive gauge found in kevn (to be) according to classical Islamic works (Figure 2.1) [3]. It can be said that its equivalents in many disciplines such as philosophy, art and architecture are used in the meanings of ‘space’ and ‘place'. In discussing the existence of space, issues such as whether the concept is an objective existence or not, did the reality exist before the objects were problematized.

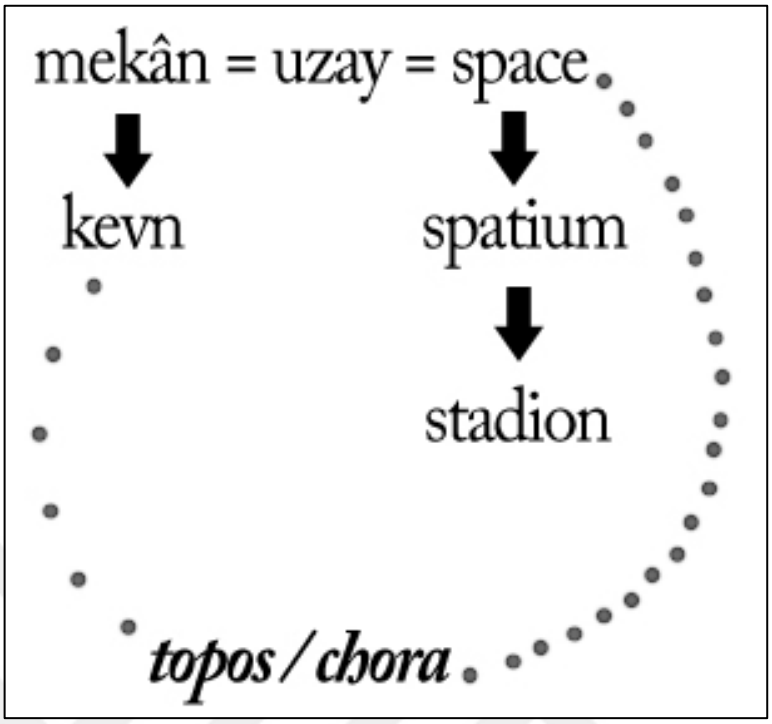



Figure 2.1. Topos and chora as the origin of the concept of space [4].

In this part of the thesis, the development of space in the historical process is examined. In this context, in order to comprehend the ontological meanings of the concept of space used in the thesis, it is necessary to examine the meanings of space and place.

***Uzam (Place)***

- TDK, GTS; Its meaning in philosophy is defined as the basic quality of the perceived objects, and its meaning as a name is explained as the place where the object occupies in space [5].
- Oxford Dictionaries; Place is used as the synonym of the word place [6].
- In the Encyclopedic Dictionary of Architecture; There is no information about space [7].

Hançerlioğlu describes place as the space that' objects occupy in space and the boundaries of space as measurable'. In particular, according to this explanation used by Descartes for space, beings are divided into two as 'thinking being' and 'spatial being'. According to him, space is defined as space with width, depth and length, and not space propagation of objects. According to Cartesians, who uses place and space as synonyms,

place means ‘the area above which objects spread in space’. Place by space means period by time [8].

***Place***

- TDK, GTS; ‘The space, that something is occupied or covered by a person’ [5].
- Oxford Dictionaries; ‘A particular position, point, or area in space; a location.building or area used for a specified purpose or activity’ [6].
- In the Encyclopedic Dictionary of Architecture; is explained as ‘the face of the soil ground, land’ [7].

Hançerlioglu describes the concept of space as space, place, position and ground as a part of the space occupied by the object and as the sum of points with the same characteristics in geometry. According to him, Descartes, unlike other thinkers, has given special meaning to the term place and describes it as the position of an object in time. According to Albert Einstein, space is ‘considered as a concept that cannot be thought independent of time, which can only be determined by the fourth dimension’ [8].

***Space***

- TDK, GTS; The space is defined as ‘the infinite void in which all beings exist, the infinite void in which all celestial bodies are presen’ [5].
- Oxford Dictionarieste; Described as ‘The dimensions of height, depth, and width within which all things exist and move. A continuous area or expanse which is free, available, or unoccupied.An area of land which is not occupied by buildings’ [6].
- In the Encyclopedic Dictionary of Architecture described as; ‘The abstract concept that we create in our minds by seeing the existence of a few things at the same time and sensing their relative states; Place’ [7].
- In the encyclopedia of philosophy, it is explained as the the infinite space that contains all the existing, the main form of existence of substance. In ancient times, space has been accepted as the same space, always and everywhere. In physics, according to Albert Einstein, time and space are considered as two conditions of existence.-General Relativity Theory. To exist outside space is not to exist anywhere; ‘Being out of time means not being present at any moment [8].’

Greek atomists used space in terms of space. Space is defined by proportions and mathematical rules in the ideal universe by the Pythagoreans who explain ‘everything in terms of numbers’ that they think constitute sensory walls. The discussions about the concept of space are discussed within the framework of occupancy-space concepts. Plato and Ela thinkers of the school have identified the emptiness with nothingness. According to them, the space in the absolute sense (khora) is described as a container that takes place on the formation and extinction of the material limited by geometric surfaces [9]. Aristotle, on the other hand, considered the concept of space as the subject space in which movement is directed, and according to him, where is space (pou) as the predicate of a subject is the answer to the question [10].

The space derived from the kevn (keynune, kiiyan) infinitive, which means being in the Dictionary of Islamic Encyclopedia, means the place where the occurrence occurs. The root of the word is also related to the gauge of space, which means having a respectable place. It also has a conceptual relationship with the term 'space' derived from the root of the foundation which is also used in terms of occupying space in classical works. Cürcânî considers the terms space hay and hayyiz seen in traditional Islamic thought in the same way and considers them as synonyms. According to the author's determination, Islamic theologians have defined the world as a space, a space with objects or spaces, such as objects or spaces, which ‘are covered by objects and whose existence is in the mind as the inner surface of the surrounding object’[4]. For Islamic mysticists, the natural universe, which is the place of god's appearance, that is to say, is the appearance of the god of nature with all its beings [10]. For them, the natural universe is the appearance of the god of nature with all its beings. [7].

In the Hançerlioğlu's Dictionary of Philosophy Terms, the word space in Arabic is derived from the word kevn in the sense of existence and is explained as the place where it is located. [7]. The concept of space, which has been developed for centuries in physics, philosophy, mathematics and aesthetic theories, has been associated with being. The place of the existing ones and the area they cover are tried to be described with physical and temporal approaches. In this context, the concept of space has been divided into categories such as mathematical space, physical space and perceived space and discussions have been made on it.

According to Van de Ven, the concept of space in architecture began to be discussed as an architectural idea in the 1890s within the scope of aesthetic theories [11]. From 1915

onwards, Raumempfindung, which means ‘the volume felt for the concept’ of space in German aesthetics, and Raum, which means space after the 1920s, was used to define the boundaries among architects. At the beginning of this century, it became a three-dimensional continuity by blending with the idea of composition and divided into metric subsections [12]. This study, which discusses the reality of space and space in architecture, necessitates a wider explanation of space in architectural process.

## 2.2. DEFINITION OF SPACE CONCEPT IN HISTORY

The space that constitutes the subject of architectural profession has been evaluated as the basic condition that constitutes an architectural product. The boundaries of the space are defined by physical and visual boundaries and the space is handled with a four-dimensional approach [11]. Different approaches to the visual and physical definitions of space have revealed various uncertainties in defining the concept of space in architecture. Three types of ontological definition of space as determined within the scope of this thesis have been identified in this line which proceeds in the axis of Ancient Period, Enlightenment Period, Modernity and Contemporary approaches. These conventions are discussed in the third chapter of the thesis. The concept of Cartesian space in the Enlightenment Period, subject-dependent space in the Contemporary Era, and reality in virtual space were adopted as three different approaches. The reason why these three approaches are discussed as a separate topic from the development of space in the historical process is that with the third chapter, the definitions of the space will proceed on the understanding of reality, unlike the historical system.

### 2.2.1. Space in Ancient Era

It is accepted that the oldest theory of space, the fundamental problematic of architecture, is derived from the Pythagorean view with the definition of ‘everything can be explained in numbers [12].’ It is known that the foundations of these views were laid at the school of thought founded by Pythagoras in southern Italy in the middle of the 6th century BC. This school was distinguished by religious, scientific and philosophical views representing the Western tradition against the Eastern tradition established in Ionia. The main approach of

the school is to treat numbers as the principles of the whole existence (arche). Pythagoreans who believe that the basic matter of the universe consists of whole numbers, think that the only absolute and unchanging knowledge is mathematical knowledge. Pythagoras states that these numbers have a geometric value and, when divided into elements of objects or shapes, correspond to the existence of various surfaces, lines and dots. They explained the objects with the opinion that they are the sum of the numbers and explained this feature of numbers with figures [13].

Philoaus who made the discourses, mathematics, solid oaths, teaching, training and doctrines of Pythagoras a book in 460 BC was a student of him. This book, Thoughts of Pythagoras, has a number of parts that have survived to this day. It is known that this book, which contains the oldest definitions of space, was found and hidden by Plato [13]. ]. According to Pythagoreans, the numbers which are the basis of being are the elements of the space. It is thought that the numbers have sensory walls and spatial size and these numbers constitute the universe [10]. According to the Pythagorasian view, the concept of space is considered to correspond to the simple numerical proportions of musical harmonies that occur when the length of a vibrating wire is measured [12]. Pythagoras discovered the relationship between the various size parameters of the measurable objects, such as the length of a wire, the amount of water in a cup, the diameter of a bell, and the sounds that these objects make. From this point, Pythagor has transformed notes into mathematical formulas. He argued that music is based on proportional intervals of numbers 1, 2, 3, 4 and the sum of these numbers constitutes the figure 10 which is thought to constitute the universe [14]. Musical harmony is defined not only as the order, pattern and rules of the individual objects, but also as a whole composed of multiple parts that make up the object [15]. Thus, each range of notes constitutes the proportional equivalent of the orbital distance between the planets in a universe model where the earth is at the center. According to Pythagoras' thesis, which is called Global Music, every planet corresponds to a note of the scale and the music sounds constantly from the universe, although not everyone can hear it [16]. Based on this thesis of Pythagoras, the famous alchemist Fludd, in his book Utrisque Cosmi in 1617, describes God as a hand that makes the accord of the universe.

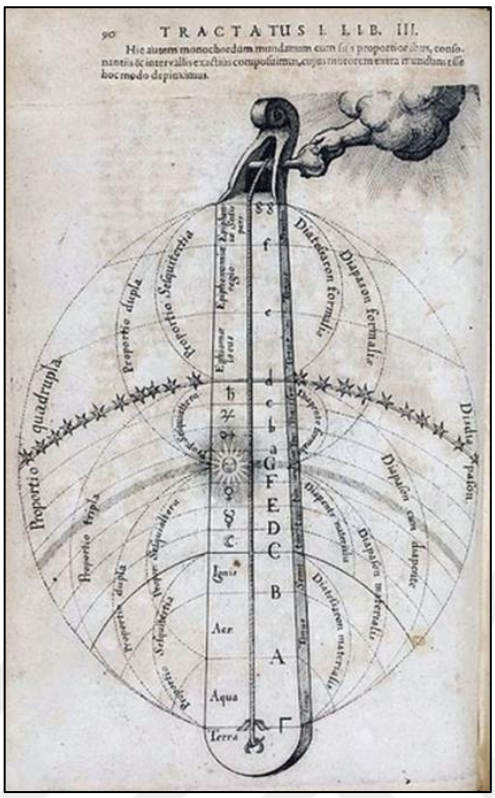



Figure 2.2. Robert Fludd. Utriusque Cosmi Historia. Oppenheim. 1617 [17].

Fludd described the universe as a great instrument, and on the right side of this instrument, which he divides in two, shows the intervals of the notes in the octave and the orbital distances of the planets that make up the universe. The exact center of this instrument is also the center of the octave in which it is located in the sun [18]. Although there is no direct source of the use of these ideas about music by the Greeks in architecture, the definition of architecture as 'frozen music' goes back to ancient times [19]. According to Cem Erözün, Hans Kayser (1891-1964) made dimensional measurements at Paestum Poseidon Temple (Figure 2.3) on the shores of Solerna Bay in Italy. He performed these dimensional measurements with the harmonic analysis method using the monocord, thus resonating the temple. It is known that the Temple of Paestum Poseidon was evaluated on a purely rhythm-based basis, rather than a proportion-based measure [20].

Figure 2.3. Paestum Poseidon Temple [21].

The ancient Greek philosopher, mathematician Plato (347 BC) founded the Athens Academy, which is now considered the beginning of modern university formation. According to R. M. Hare, Plato was influenced by Pythagoras at three points. First, the Academy is similar to the schools established by Pythagoras. Academy professors adopted the idea that mathematics was a safe basis for philosophical thought, and had the idea that the mysterious path to the soul had a material counterpart in the world [14]. Plato defines space as the place that constitutes the most fundamental points of ontology and the place in which genesis and ideals occur. According to him, matter and space are the same thing [10]. Unlike Pythagorists who explain everything about the concept of space in numbers, Plato considers space as one of the four elements that make up the universe (air, earth, fire, water). (Figure 2.4.).

> God shaped these four elements to be as perfect and flawless as possible, when they were not before. My task now is to explain what each structure requires and how each one occurs. My explanation will be something unusual. First of all, I'm sure everyone knows that fire, earth, water and air are objects. Now everything that has a physical form has also a depth. Moreover, the depth is comprehensible within a surface, and any surface is surrounded by straight lines consisting of triangles [9].

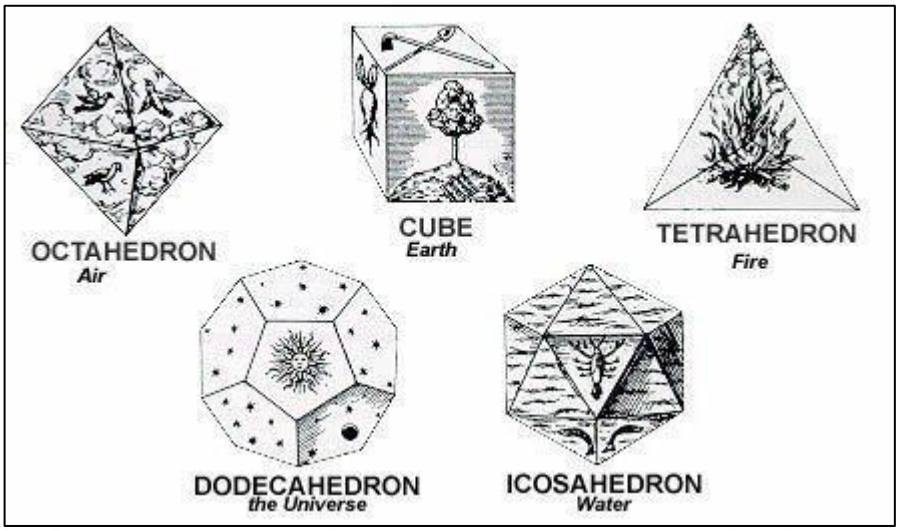



Figure 2.4. Platonic Objects [22].

According to Plato, the universe has a stable and completed structure. Fire was used to make it visible and soil was used to touch it. When God created the universe, he placed water and air between fire and earth, and brought all four components in proportion to each other [23]. Based on the ideas of the Pythagorean Philolaus, Plato imposed certain spatial structures on these elements that make up the universe: while the structure of the dodecahedron expresses the universe, he attributes icosahedron to the water, octahedron to the air, tetrahedron to fire, and the spatial structure of the cube to the earth. According to Plato, these attributes are copeis of what described in the universe of ideals. For example, calling something a fire does not mean that it is really fire, which means that it is something like fire.Plato calls it hupodokhe[1] [24]. Plato uses the word khora, which means place, earth, space, openness, which corresponds to mathematical space. Platonic thought system, which reduces space to geometric forms, reduced physics to geometry. In this reduced universe, things that are abstract and mystical become visible and concrete, so that the person who tries to find a place for himself finds his place in the ideal universe of Plato.

In the later stages of the Plantonian thought system, the definition of harmony became clearer and became a concept consisting of numbers and proportions. The Greek thinker Aristotle

[1] Hupodokhe consists of the terms hupo and dokhe; hupo is generally translated as below.Dokhe is at the origin of dekhomai, and hupodokhemai is translated literally or figuratively as taking it under a roof, receiving, accepting, meeting, protecting, taking over. In this context, Hupodokhe means friendly welcome, acceptance, consent, shelter, shelter. For further information: Çelgin G. Eski Yunanca-Türkçe sözlük. İstanbul: Kabalcı Yayınevi; 2011.

(384-322 BC), who took this phenomenon one step further, assumed that all natural laws were based on numerical order. Listening to Plato's lectures at the Academy, Aristotle divided the sciences into four as metaphysics, natural history, logic, morality. While working in many fields such as politics, morality, literature and natural sciences, he applied to experiments to find the truth. He considered order, sequence, symmetry, limitation and shapes as the subject of mathematics and considered them as elements of good and beauty [13].

Aristotle stated that all the elements that make up the universe are elements of numbers and that the universe is number and harmony [10]. According to him, the acceptance of the existence of beings in a place begins with the question of what the space is and the way to examine the objects arises when the answer to this question is found. Aristotle describes the space with the term topos, which means physical space, despite the word khora, which corresponds to Plato's mathematical space. According to him, topos, which expresses the existence of an object in one place, has three meanings: First, topos is something infinite, expansive, dynamic and difficult to grasp. Secondly, it is hollow, something that can be filled, and finally space means creation. In general, space refers to the location of an object in motion [25].

According to Nalbantoğlu, the space of Aristotle refers to the place of an object in motion, its outer surface is in contact with the outer surface of another thing [1]. In this case, the place where something (object) is located describes a space, the object is not located within an existing space in the sense we understand but describes a space around itself.

The Roman architect Vitruvius[2] who lived in the 1st century BC, unlike Pythagorasans, considers harmony as a repetition of a module formed by the relationship between simple numerical ratios established among all elements of the structure [12]. In his book titled 10 Books on Architecture, Vitruvius stated that architecture is composed of ordination, design (disposition), harmony (euryyhmia), symmetria, conformity (décor), and distribution. According to him, in buildings that are expected to be in accordance with the principle of

[2] Vitruvius, in full Marcus Vitruvius Pollio, (flourished 1st century BC), Roman architect, engineer, and author of the celebrated treatise ‘De architectura’ (On Architecture), a handbook for Roman architects. For further information: Vitrivius. Britannica. [cited 2019 7 October]. Available from: https://www.britannica.com/biography/Vitruvius

robustness, functionality and beauty, the space should form a harmony with all internal and external elements, and for the functionality to be organized, the space arrangements should be made in a manner that does not prevent use. All elements of the building must have perfect symmetry [26]. Vitruvius, considering its structures according to the proportional principles, assumes that symmetry can create harmonious spaces. Symmetry is that the relationship between two quantities that can be measured for him is based on a common measure [27]. As for the adaptation of temple architecture to symmetry, it shows the proportions that nature creates when designing the human body (Figure 2.5). According to Vitruvius, the Greeks have developed the competent number that they call mandatory teleion for all buildings as a unit of measure [26].

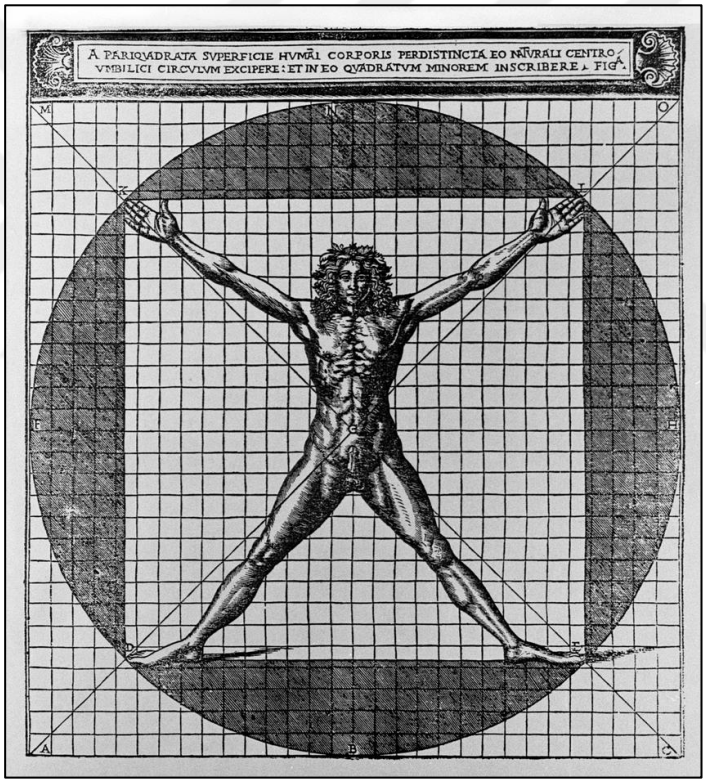



Figure 2.5. Cesare Cesariano. Homo ad circulum. 1521 [28].

The centuries from the end of ancient Greek and Roman civilization to the millennium were defined as dark years for Europe. Barbarian invasions caused the destruction of Roman civilization. Important roads and opened farmland have been recaptured by nature, agriculture is neglected, basic techniques of metal and stone mining are forgotten [29]. Following this dark period of the Middle Ages, the Scholastic thought system, defined as Christian philosophy, became the dominant view in Europe between the 9th and 16th centuries. In the Middle Ages, which was one of the dominant periods in the field of thought

after Ancient Greece, Scholastic thought method was effective. This system of thought, defined as medieval Christian philosophy, became the school of religious philosophy in Europe between the 9th and 16th centuries. This approach tried to establish the Catholic dogmas of the Christian church in Aristotle science [30]. Ignorance of deficiencies of Scholastic method to facts and science. 'The belief in reasoning only where observation would result.' Scholastic thought, despite respect for Plato and Aristotle, came into being, according to Russell, who explained irrelevant stance on verbal distinctions and subtleties [31]. Although it is known that the definition of space was continued through Plato and Aristotle conception in the Middle Ages, it was seen that this approach, which originated from Ancient Greece, was combined with Christian belief and presented as an understanding of upper celestial space and celestial space [4]. It has become easier to reach the heavenly space. This style, which was previously considered only as a new technical invention, gave the believers a reflection of another world with its wide and high interiors, abundant luminous openings and glorious heights, and a part of the image of paradise landed on the ground [32].

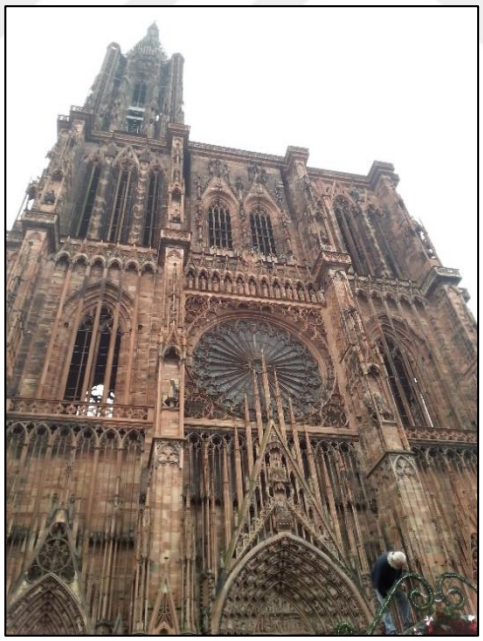


Figure 2.6. The cathedral of Notre-Dame in Strasbourg, photograph taken by author.

Although there are changes in the basic definitions and meanings of space, these ages in which there are no significant changes in the ontological definition based on the knowledge of existence are not included in the thesis content as they are excluded from the scope of ontological interpretations over the reality of the space as discussed in the thesis. However,

within the scope of the thesis, the definition of Cartesian space defined as the first break of the reality of space and the underlying idea of the Enlightenment Period and the Renaissance that prepared this period were introduced in the next subtitle and the relationship between it and ‘Ancient Greek space’ was opened to discussion.

### 2.2.2. Space in Enlightenment Era

Enlightenment is considered as a movement of thought that reached the highest level with the 1789 French Revolution, where social and intellectual changes took place under the influence of the Renaissance period. This period in which new approaches to human and individual life emerged was the result of the historical development of western civilization. This human-centered way of thinking, the development of the capitalist economy that began in England, the liberation movement that emerged with the French revolution, and ultimately the idea of the Enlightenment, whose philosophical foundations were laid in Germany and which would influence the whole world, turned into a modernization movement [33].

For medieval physicists, thinking and understanding God's work stems from the desire to get closer to God's knowledge. In the Enlightenment period, the engineer-scientist followed the footsteps of the creator who created nature by solving the mechanism of nature and designing new machines similar to the mechanism of nature. Enlightenment thinkers interpreted God's creation of nature as a blessing offered to human use. As a result, the idea that natural sciences will develop with experience has become the dominant view. In the 17th century, leading thinkers of Europe such as Galilei, Gassendi and Descartes considered nature as a machine and interpreted it as the art of using this machine and making new machines in science [34]. As a result of the new human project that started with the Renaissance, the intellectual and philosophical infrastructure of Western civilization in search of new people and new society emerged in the Age of Enlightenment [33].

Renaissance, which prepared the period of enlightenment, ‘the transition movement in Europe from the Middle Ages to the Modern world means rebirth’ [35]. It began in Italy in the 14th century and spread to Central and Western Europe in the 16th century. Renaissance is defined as the re-emergence and emulation of Antiquity [11]. In this period, scholastic thought was replaced by the adoption of the doctrines of Ancient Rome [29].

The scholastic thought system was influential as a religious-based thought movement in monasteries and then in Cathedral schools until 1000, unlike antiquity and modern philosophy. This institutionalized approach to education has led the universities of the period to work with the University of Bologna and the Notre Dame theological school. The University of Paris founded by the merger of Genevieve logic school [36]. Scholastic thought is defined as a system of thought based on religious reality that allows no discussion of reason [37]. With the resolution of the ban imposed by the Middle Ages on human personality, man became individualized [38]. The new man of the Renaissance has become a personal person, not a religious person. The humanist approach, which is the distinctive feature of the period, evaluated the external world with its relationship with human beings. The person who renews his knowledge and doubts dogmas has destroyed the metaphysical foundation and established the individualist foundation [37].

The concept of space of Renaissance, where scholastic thought has been replaced by scientific thought, scientific developments have begun and the doctrines of the ancient world have been rediscovered, embodies the ideas of Pythagoras, who explains the essence, truth, and main matter of all objects in numbers, and Vitruvius, who seeks the suitability of all the elements that make up the building to a modulation.. In this period, the necessity of considering the space requirements of architecture as a mathematical science and seeking universal harmony in architectural works became an important approach [39].

In Renaissance architecture, where Plato's understanding of the universe is effective in the design of structures using pure geometric forms such as squares, circles, triangles and so on. It is possible to see this effect of the antiquity on architecture in many works of the period. For example, Villa La Rotonda (Figure 2.6), which Palladio designed for a cleric inspired by the Roman Pantheon, is an important example [39]. The building, which uses geometric forms such as circles, squares, spheres and cubes, has a central plan and a small dome. The facades of the structure, where all the spaces form a certain ratio with each other, are symmetrical. The structure has four separate entrances.

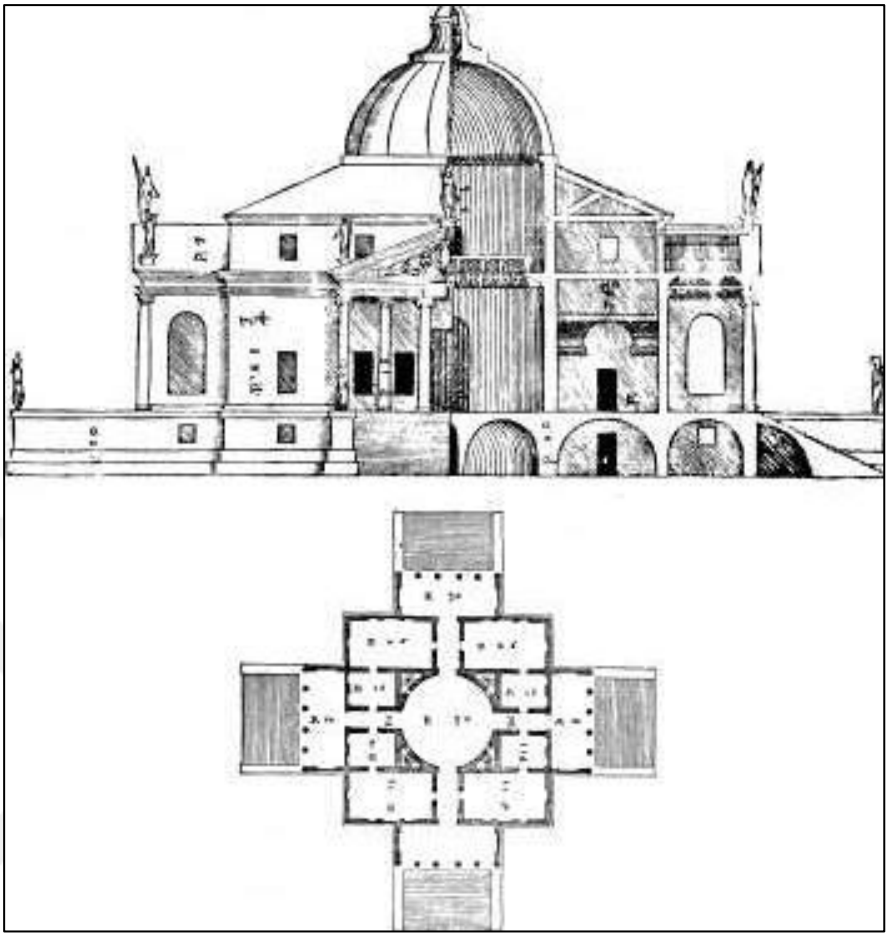


Figure 2.7. Andrea Palladio, section and ground plan of the Villa Rotonda (formerly Villa Capra). Vicenza, Italy, 1566-1590s [40].

Like Palladio, it is possible to see the effect of antiquity in the works of Leon Battista Alberti. The Santa Maria Novella Church (Fifur Santa maria novella), which was built in the 12th century but completed in the 14th century, is one of the most important religious and artistic structures of Italy. Supported by the works of famous artists like Giotto, Brunelleschi, Botticelli, Michelangelo, the structure of the facade was completed in 1470 by Alberti. Alberti's approach was to design the façade of a Gothic building with a modern approach. The artist, who interpreted the pre-existing Gothic elements in a new style, baroque style, achieved a perfect harmony. Triangular, circle, square, rectangular and attached geometric forms applied in antiquity were proportionally used on the façade [41]. The facade of the Church of Santa Maria Novella (Figure 2.7) completed by Alberti is an important example of various proportions and geometric relationships. The facade ratios of this structure, 1/1, 1/2, 1/3, 2/3, 3/4 ratios found in classical structures give simple ratios of musical harmony theory [42].

Figure 2.8. Santa Maria Novalla, Florence, 1200-1470 [43].

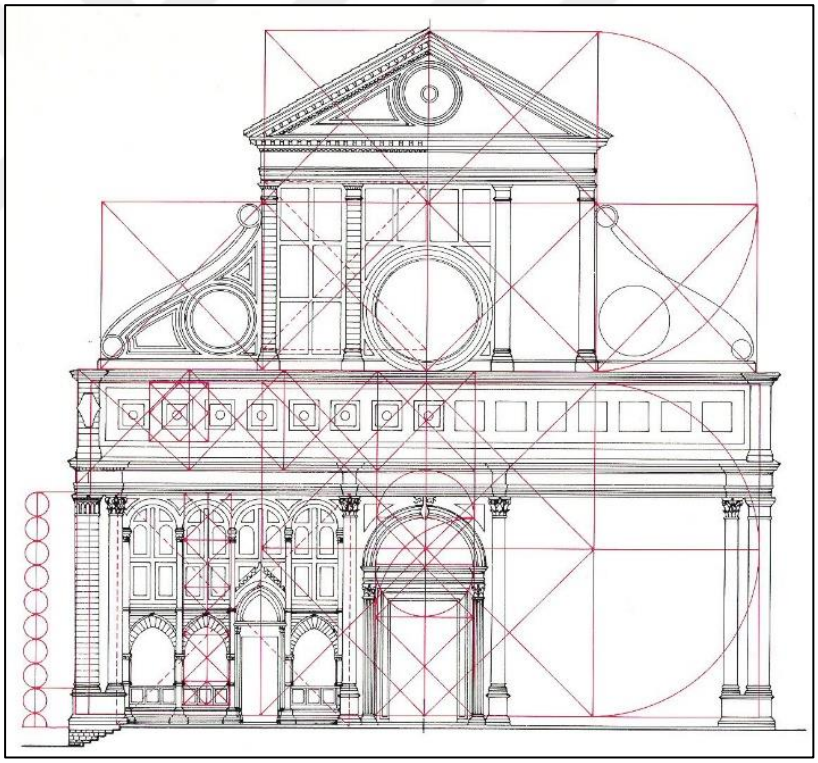


Figure 2.9. Leon Battista Alberti. Illustration showing the relationship between the facade and geometry of the church of Santa Maria Novella [44].

The classical theory of architecture, which embodies the understanding of harmony, balance and symmetry, which the Renaissance seeks for space needs, has been criticized in the Baroque era and it has been argued that architectural bases are the result of habits rather than logical implications. Unlike the Renaissance, which began with Pythagoreans and continued

with the logical proportions of Vitruvius, the Baroque era had a tendency to react to traditional rules based on the concepts of good proportion. This tendency manifests itself in Borromini as in many other works of the period. According to Altan, Borromini ‘used geometric methods to determine the lower parts of the original form rather than arranging the plans and facades of the building with measurable sizes’. These numerical and geometric concepts, which accept proportion as a common factor, are still present in the spoken language of architects even today [12].

In the early 1900s, Adolf Loos talked about the greatness of Antiquity and saw the distinction of classical elements from architecture and the use of imitation materials in buildings as an important danger. According to him, the super-architect will come back and save architecture from all foreign elements. He thought that the architect of the future should take the classical education and participate in the construction process. Loos, who said ornament is a crime, evaluated the covering of building facades with cladding materials as ornament. In the city of Potemkin, village houses were built from cardboard and sail tents to give Katerina the impression of a developing region. He compared the effect of the new buildings made by the imitation of the classical elements in Vienna with cheap materials to the effect of the city of Potemkin and described this approach as a crime [45].

In the structures of the Renaissance period, the ideas and approaches of the Antiquity were adopted, and the space was designed within the framework of the mathematical proportions of Pythagoras and the logical proportions of Virtuvius. This period was the beginning of the age of reason in which a different approach to space emerged. Descartes' Cartesian method seems to be the most prominent system of thought of the period, accompanied by new answers to questions about what is being. Being thought to exist independently of the human mind until Descartes, it has now found its reflection in a space that can be designed as a product of the human mind. Cartesian method developed by Rene Descartes has been considered as a model for the discovery of universal science. Descartes, who leads with the idea that ‘if I doubt anything then I exist and that I can extract all other information from my own solid knowledge’, has become the founder of the New Age philosophy with this method developed for access to information [37].

The limited universe idea and space theory of the Aristotelian tradition, effective until the 16th century, has completely changed. In addition to the rotation of the outer ring of the universe, Copernicus thought that the Earth also had a relative movement. Galileo Galilei

said that the center of the universe was the sun in the 17th century [23]. Unlimited universe and unlimited space debates and Cartesian model developed by Descartes found its spatial counterpart in the modern era. The intersection of the space in modernity section, which will be examined in a subheading, necessitated the discussion of the Cartesian space in that section.

### 2.2.3. Space in Modern Era

Modernity is defined as the forms of organization and social life that began in Europe in the 17th century and influenced the whole world. Modernity, which defines an organization and a way of life, requires a certain period of time and geographical positioning with this approach. The understanding of time and space of the modern approach has not been dealt with separately [46].

Descartes' Cartesian method was found to be very effective in the understanding of space in the modern world. Cartesian understanding of space is based on the production of space. The principle of separation between ‘the thinking’ (res cogitos) and ‘the spreading’ (res extense) formed the basis of the Cartesian method [47]. The space considered as res extense has been evaluated as a static object with lines, surfaces and coordinates that can be designed [48].

Hume, another thinker of the Enlightenment period, stated that the source of information was to experiment; he argued that experimentation and sensation give traces of objective reality, but objective reality is unknown. According to him, universal and non-essential experiment is illusion and not real. Every time we see the cold by experiencing the freezing event that follows the cold, the error of the assumption that the freezing event will take place every time following the cold, leads us to the fact that the experiment is illusion. Hume's notion that the existing truth against the final judgment of experimentation is illusion formed the basis of Kant's ideas. Kant, who brought the human mind against nature, argued that this mind established all-natural objects [37].

With these approaches, the existence of space is considered as a product of the human mind and evolved into the transformation of the concept of space into a computable and designable object in this period of the modern world. With this approach, spatial space has been constructed with measurements and calculations.

The effects of the modernist approach, where the existence of the place descended to the earth and produced as a static object by the human mind, are the architects who stand out in their structures and discourses; Le Corbusier, Frank Lloyd Wright, Walter Gropius and Ludwig Mies Van Der Rohe have an important place in the architectural literature.

Le Corbusier[3], one of the prominent architects of this period, started to design the life of the user of the space as the subject designing the space. Le Corbusier argued that architecture is a form-independent phenomenon and pointed out that architecture has more important purposes than decoration. He defined these aims of architecture as objectivity and abstraction. According to the Architect, who states that the space can affect the most primitive intuitions with its objectivity and that its abstraction will be the center of attraction of the most distinguished talents, the quality of architectural abstraction will give spirit to the brute reality. Rough order is a possible symbol of a thought, so it needs to be shaped. He thought that if the rough order was shaped and projected, it would lead to a thought. Le Corbusier, who argued that architecture can only manifest itself in mass and order, emphasized the importance of the plan and emphasized that the creative is the plan. He argued that the space set out from the plan would be designed more balanced. According to Le Corbusier, who reminds architects of the importance of mass, surface and plan, he stated that by using these easily understandable geometric forms, the mass could transform into simple forms, that the surface covering the mass would give it its personality and that there would be irregularity in the absence of a creative plan [49]. Vitruvius' principles in architecture, Firmitas (strength), Utilitas (functionality), Venustas (beauty) emerged as Le Corbusier strength, functionality and aesthetic (Figure 2.10.).

[3] 'Le Corbusier, byname of Charles-Édouard Jeanneret, (born October 6, 1887, La Chaux-de-Fonds, Switzerland—died August 27, 1965, Cap Martin, France), internationally influential Swiss architect and city planner, whose designs combine the functionalism of the modern movement with a bold, sculptural expressionism.' For further information: Le Corbusier. Britannica. [cited 2019 2 September]. Available from: https://www.britannica.com/biography/Le-Corbusier

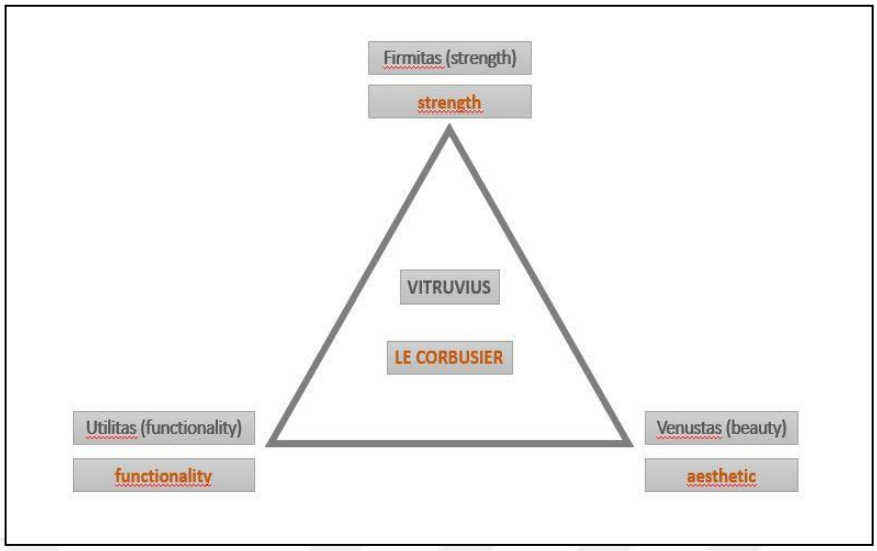



Figure 2.10. Le Corbusier and Vitrivius, relational diagram, drawn by author.

These three principles that Vitruvius expects to be suitable in buildings depend on the harmony of interior and exterior elements, perfect and convenient space arrangements and perfect symmetry. While Vitrivius sought the search for symmetry in the proportions that nature used to design the human body, Le Courbusier designed and modulated the proportions of the human body. Le Modulor (Figure 2.11.) is a dimensioning catalog he designed in the 1950s. The aim of the design was to create a new dimensional language in accordance with human dimensions by purifying architecture from different units of measurement [50].

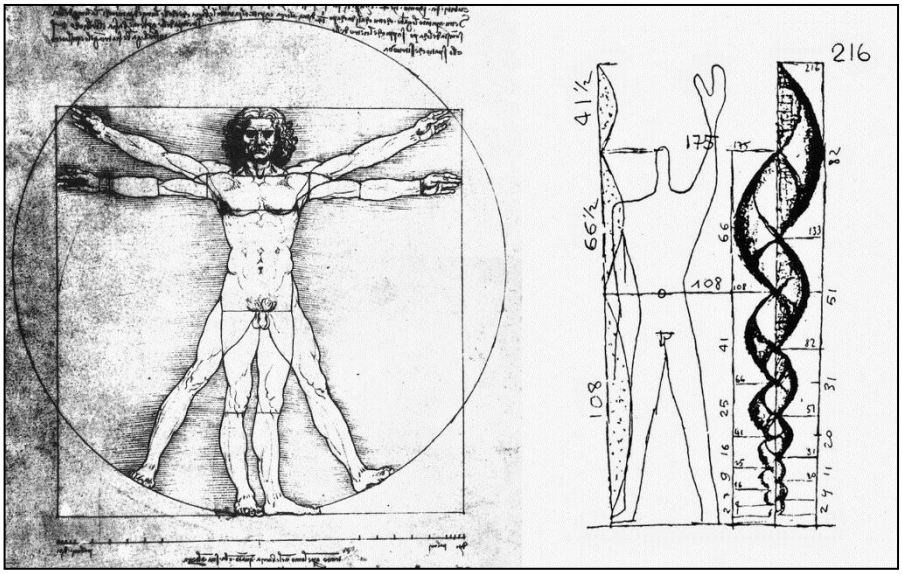



Figure 2.11. Vitruvian Man and Modulor Man [51].

Le Corbusier's architectural works, which were thought to lead the modernism and modern architectural approach in the 20th century, contain categories such as context, privacy, publicity and built art. The works reflecting the modernity approach of the architect (Figure 2.12.) became reference to 20th century architecture and to young architects [52].

Figure 2.12. Corbusier’s buildings in a collage [53].

One of the most important approaches that influenced the understanding of space in the modern era was the Bauhaus school founded in 1919 in Weimar, Germany under the leadership of Walter Gropius. Later, the approaches developed into a school developed by bringing together artists and craftsmen. Masters of Form, the first workshop of form masters and artists, and Masters of Craft, the second workshop, taught craftsmen. The Bauhaus school is an organized approach to all the branches of art serving the building as a result of the expansion of the boundaries of building production by the technical developments that emerged after the Industrial Revolution and World War I. As a result of political pressure in 1925, the school moved from Weimar first to Dessau and then to Berlin in 1932 under the leadership of Ludwig Mies van der Rohe. It was closed in 1933 as a result of political pressure. Many of the prominent artists and designers who taught at the school settled in the United States, such as Gropius, Mies van der Rohe, and continued to work here [54].

Bauhaus workshops are designed in many objects and articles from furniture to lighting products and many of them are mass produced (Figure 2.13.) because they are inexpensive and convenient to use [55].

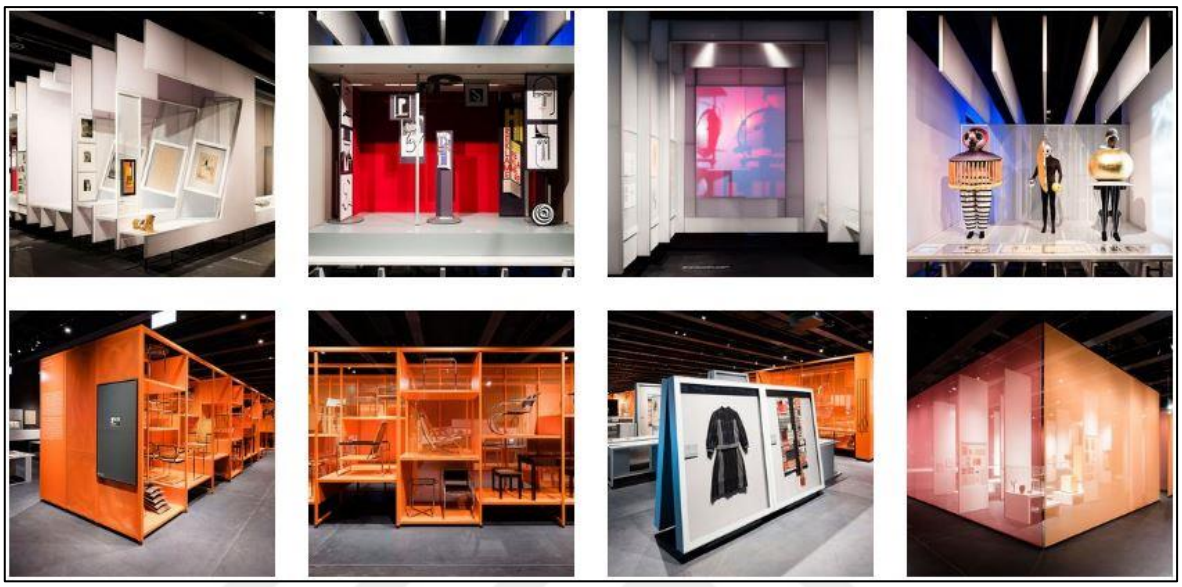


Figure 2.13. Different styles from Bauhaus [56].

One of the best examples of the Bauhaus design concept is the building of the Bauhaus design school in Dessau (Figure 2.14.). Designed by Walter Gropius, the building was funded by the city commission of Dessau. Construction started in 1925 and completed in 1926. The interior fittings were made in the Bauhaus workshops. The building consists of asymmetrically positioned wings which are connected to each other by bridges. The complex has a three-storey workshop wing with a glass facade, a three-storey vocational school and a five-storey studio building. These structures are associated with each other according to their functions. The workshop wing and the studio building are connected by a single-storey building consisting of an auditorium, stage and canteen. The 28 studios, each 20 m2, are designed to accommodate students and masters. These wings are designed to serve different functions, allowing you to explore the complex from the outside. The complex, which mainly consisted of white glass facades, was bombed and damaged during the Second World War and was included in the World Heritage List by UNESCO in 1972 and underwent extensive restoration [56].

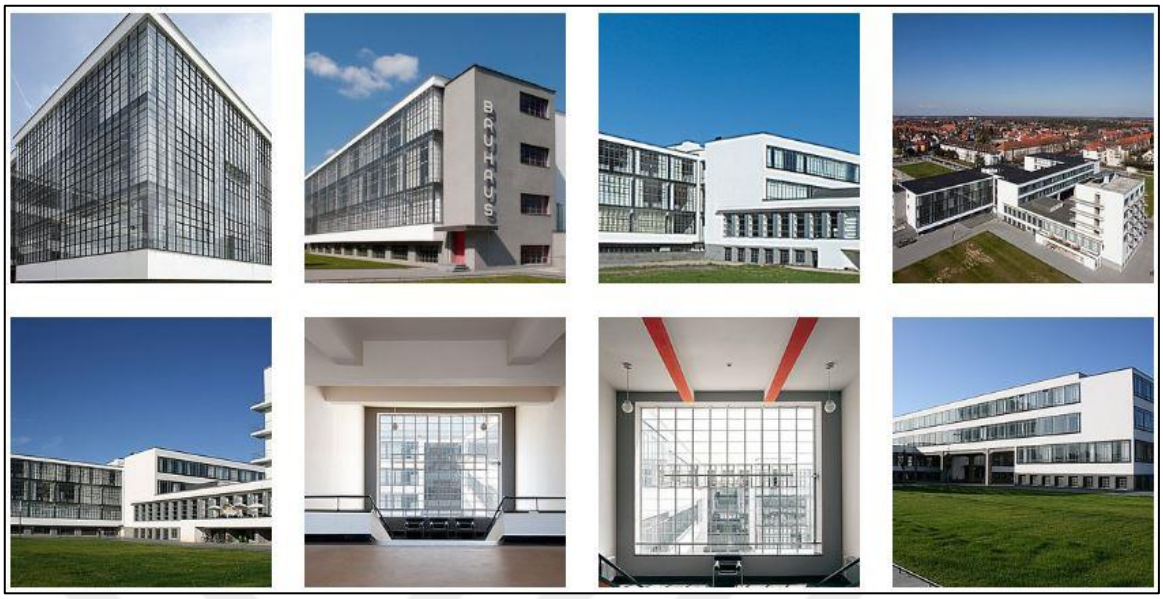



Figure 2.14. Bauhaus Building, Dessau [56].

Stating that modern space is based on the 'free plan' principle, Zevi thought that modern architecture adopted the Gothic period and acted on the basis of the new technique to realize his artistic intuitions. He stated that the glass surfaces made with the effect of Gothic bases make an absolute contact between interior and exterior spaces. An example of this is the German Pavilion (Figure 2.15.) at the Barcelona exhibition in 1929, designed by Ludwig Mies van der Rohe[4] [45]. The building, which uses glass, steel and natural stone (Roman travertine, green alpine marble, ancient green marble and onyx stone), is one of the most important works of modernist architecture. In order to emphasize the modern stance of the building, Rohe planned smooth and sharp spaces and provided it with materials that allow the preferred sharp surfaces. The plan scheme used in the grid system defines the wall system within the building. This system made the system more visible by using the travertine stone used on the foundation of the structure horizontally on the walls. The horizontally expanding structure is in harmony with the narrow space on which it is located. The low ceiling of the structure strengthened the relationship it established with the skyline. The interior is supported by frame openings created by the low ceiling and offers visitors the opportunity

[4] 'Ludwig Mies van der Rohe, original name Maria Ludwig Michael Mies, (born March 27, 1886, Aachen, Germany—died August 17, 1969, Chicago, Illinois, U.S.), German-born American architect whose rectilinear forms, crafted in elegant simplicity, epitomized the International Style of architecture.' For further information: Mies van der Rohe. Britannica. [cited 2019 5 September]. Available from: https://www.britannica.com/biography/Ludwig-Mies-van-der-Rohe

to perceive the outside in a wider and more spacious way. The low walls of the pavilion, frame openings, and the simplicity of smooth and fluid surfaces have allowed visitors to explore the inner and outer world [57].

(a)

(b)

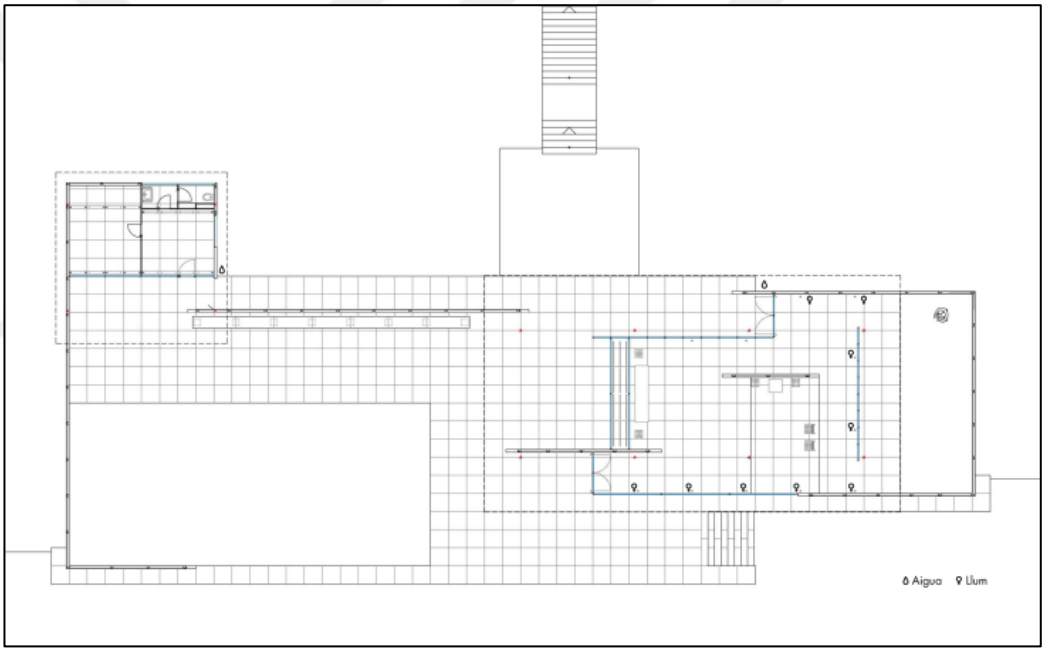



Figure 2.15. Mies van der Rohe. Barcelona Pavilion. 1929. (a) Photos from different perspectives. (b) Ground plan [58].

According to Zevi, modern space is not a dream to be achieved. The architect is based on functional concerns rather than aesthetic concerns of previous periods. It has preferred simplicity within the framework of social needs with the spatial gains and technological opportunities previously obtained. The individuals of modern society no longer wanted monumental buildings but dwellings in which they could live [59]. Developing technology, material knowledge and techniques as a result of modernity, mass production, the rapid growth of cities, has pushed the spaces of the modern world to grow rapidly. After the destruction of the World War II, the western societies that recovered rapidly needed the rapid

and serial production of the architectural product. The mass-produced spaces generally had the same typology and form, but also suggested the same way of life. The standardized way of life in the modern world was not limited to the suggestion of wonderful family life in American films. Despite many simple, functional and economic features of modern space, the subject had already begun to think beyond the space designed for him. In a subtitle, Space in Contemporary World tried to understand the period by focusing on the changing meanings and actors of the space through changing world views.

### 2.2.4. Space in Contemporary World

In this period, the ontological understanding of space underwent a change in meaning in the history of thought with the interpretation of Heidegger[5] to the question of 'What is Being?'. In the modern world, where multiple views of how space is handled, the views of the thinker appear to have an important place. Heidegger started out with the view that philosophy, whose purpose is to question existence, cannot define what is being because it is to confuse objects and things to each other. He argued that existence should be kept separate from all kinds of objects with the conclusion that the existence of being cannot be expressed only as ontic view [60].

Heidegger's lectures on antiquity guided his view of existence. The idea of the direct acceptance of 'the pre-Socratic nature philosophers was forgotten by the influence of metaphysics'. According to Heidegger, this was the philosophical approach of metaphysics in explaining 'being'. This understanding of existence continued with Aristotle and was influenced by religious views in the Middle Ages and defined in the field of divine existence. The philosopher opposed the Cartesian method of Descartes, which was at the center of modern Western philosophy and guided it. In contrast to the epistemological-based conception of existence of the Cartesian tradition, Heidegger's conception of existence

[5] Heidegger born September 26, 1889, Messkirch, Schwarzwald, Germany—died May 26, 1976, Messkirch, West Germany, German philosopher, counted among the main exponents of existentialism. His groundbreaking work in ontology (the philosophical study of being, or existence) and metaphysics determined the course of 20th-century philosophy on the European continent and exerted an enormous influence on virtually every other humanistic discipline, including literary criticism, hermeneutics, psychology, and theology. For further information: Martin Heidegger. Britannica. [cited 2019 1 September]. Available from: .https://www.britannica.com/biography/Martin-Heidegger-German-philosopher

developed ontologically. This ontological understanding of being influenced the theories of existence after him [61].

Heidegger argued that ‘being indescribable does not prevent the questioning of the meaning of the being, but on the contrary, it acts with an approach that requires that meaning to be questioned’. The thinker, who states that existence is a self-evident concept, evaluated the existence itself by stating that existence is used in knowing and suggesting, in other words, all behaviors about existing things. Dasein, which gave answers to questions about existence in modes of being, said that was the principal actor in the question of what is being [60]. Heidegger used Dasein not as man himself, but as the continuing existence of a human being in his lifetime. With this approach, it is seen that experience is the main actor in the space definitions and the understanding of the experienced space. One of the most important explanations of this approach came the theoretician Henri Lefebvre.

For Heidegger, Dasein appeared not to be used as man himself, but as the continuous existence of a human being in his life, which means German. With this approach, it is seen that experience is the main actor in the space definitions and the understanding of the experienced space has emerged. One of the most important explanations of this approach was the theoretician Henri Lefebvre.

The space transformed into an object against the subject with the Cartesian approach has entered the boundaries of the absolute space. However, according to Lefebvre, who states that the experience of the subject is not included in this understanding of space, space connects the mental with the cultural, the social with the historical [62]. Theorist who emphasized perception and comprehension of space, perceived triple space respectively; perceived space, designed space and living space. These spaces are not self-isolated but rather historically evolving, dynamic and living mechanisms [48].

In the context of this experienced space, Bernard Tschumi's Park de la Villette project (Figure 2.16.) can be given as an example. The Park is designed for a national competition aimed at stimulating the future economic and cultural development of an important part of Paris. The competition was held in 1982 and the design of Tschumi was the winner after a total of 470 projects were evaluated. The building, which is designed as a discontinuous but still a single building, aims to move the city to the park. The building is intended to be a center of attraction for the social and cultural activities of the people. The structure, which

includes a science and technology museum, concert areas, areas that will allow for scientific experiments and competitions, a gymnasium, and places to allow workshops, is visited by approximately 8 million people annually [63].

The components of modernity are based on experiences of individuals. These components are classified by specific steps. The nested steps identified as a result of this classification are described as: rationalism and rationalization, bureaucracy, individualization, secularization, differentiation, domestication. As a result of the spread of the products of technological and administrative activity which is one of the basic features of modernity, it has brought about differentiation in fields such as economy, religion, family institution and politics. In postmodernity, defined as another aspect of modernity, the individual wanders through a different field of consciousness [64].

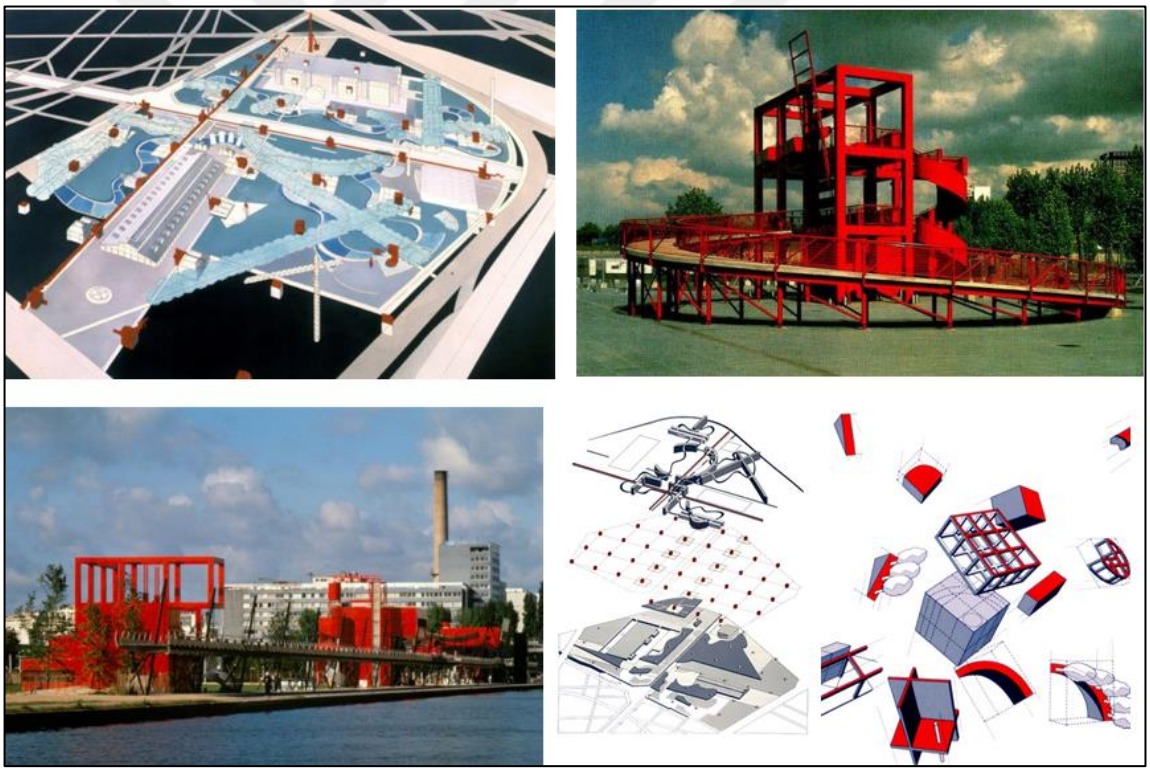


Figure 2.16. Various representations of Park de la Villette designed by Bernard Tschumi [63].

The components of modernity are based on the experiences of individuals. These components are classified by specific steps. The nested steps identified as a result of this classification are described as: rationalism and rationalization, bureaucracy, individualization, secularization, differentiation, domestication, functionality. As a result of

the spread of the products of technological and administrative activity which is one of the basic features of modernity, it has brought about differentiation in fields such as economy, religion, family institution and politics. In postmodernity, defined as another aspect of modernity, the individual wanders through a different field of consciousness [64].

The period of postmodern theories emerges as the period in which the most heated debates on space are held in the architectural literature. Sequentially, the focus of the discussions was virtuality. According to Aydınlı, as a result of looking at the discussions of virtuality with different paradigms in the architectural environment, resulting in the shifting of meaning or reducing to a discipline, the necessity of addressing the concepts of hyper space, hybrid space and cyber space independently from the disciplines has been required [65]. Although the virtuality of the space necessitates the reconsideration of its theories, these debates are the most up-to-date debates today.

## 2.3. CHAPTER REVIEW

In order to understand the concepts of space, the definition of space in history has been examined under four headings. Space in Antiquity, Space in Enlightenment, Space in Modernity, Space in Contemporary World.

The dominant views and approaches identified in Space in Ancient Era section cover the 6th century BC and 5th century AD. With the effect of Pythagorean mathematical order, the universe model composed of numbers with spatial magnitude and their reflections on space were determined. Plato and Aristotle came after Pythagoras. In this period, when the concepts of genesis and cohora were dominant, space was considered as a formation reflecting ideals. The reflection of space to the world is handled with geometry. With the influence of Ancient Greece, Vitrivius considered the symmetry and order as the essence of the space.

After a thousand years of darkage, the influence of scholastic thought, which combines Ancient ontology with Christian belief, was dominated by the concept of celestial space based on mathematical order. The beginning of the reading of the ancient Roman and Greek works in Scholastic Schools accelerated technological and scientific developments and the 14th century became the beginning of the Renaissance era.

Space in Enlightenment Era coincided with the influence of Renaissance and Enlightenment philosophy and the combination of ancient ontology with reason. The man who dominated nature and imitated it and made new machines now had the power to design. This approach has enabled people to regain the power to design in space. The absolute space that can be produced with the human mind was mentioned in this period. Descartes, one of the pioneers of the Enlightenment philosophy and his Cartesian method emerged in this period, but it was confirmed that the spatial equivalent was in the Modern era.

In this period, the emergence of the Cartesian model, the mathematical integrity of the article and the human mind produced the concept of absolute space. Space in the Modernity section the Cartesian method and the space produced by the mind has emerged with the dominance of the philosophy of Enlightenment. In this period, the definitions of space and the ontic existence of the space completely differentiated from antiquity ontology. The existence which ancient ontology accepts to exist spontaneously, can only be understood by the human being in the Modern era. Finally, in the Contemporary period, the classification of the space, the experience of the space and the dominance of the subject and the emergence of new space understanding has been confirmed. In the same section, the virtuality of the space and the simulation theories have been expalined.

Table 2.1. Space in history. Constituted by author.

| SPACE IN HISTORY | ANCIENT AGES | | | MIDDLE AGES | MODERN PERIOD | | CONTEMPORARY PERIOD | |
|---|---|---|---|---|---|---|---|---|
| | Pythagoras | Plato and Aristotle | Vitruvius | Scholastic Thought | Renaissance and Enlightenment | Modernity | Contemporary World | Simulation Theory |
| 6th century BC | **MATHEMATICAL ORDER As the basis of existence, numbers have spatial magnitude and these numbers form the space of the universe.** | | | | | | | |
| 4th century BC | | **GENESIS AND KHORA Space is a reflection of ideals (genesis) and takes its reality from basic forms with four basic elements (Platonic forms) Space is formed by geometry in the world (Aristotle)** | | **COMBINING ANCIENT ONTOLOGY WITH CHRISTIANITY Celestial space; math and order heavenly space; divine space where ideals exist** | **THE CONNECTION OF ANCIENT ONTOLOGY WITH REASON The ABSOLUTE SPACE created by the human mind and the mathematical integrity of space. Space is only possible with the human mind.** | | | |
| 1st century BC | | | **SYMMETRY The symmetry as the essence of space - the relationship between two measurable quantities to a common measure.** | | | | | |
| 5th - 15th century AD | | | | | | | | |
| 15th-19th century AD | | | | | | **PRODUCTION OF SPATIAL SPACE WITH MIND The intellectual subject who produces space. Classification of space.** | | |
| 19th-20th century AD | | | | | | | | |
| 20th-21st century AD | | | | | | | **SPACE EXPERIENCE AND EVENT The subject-space relationship and the subject creating the space** | **VIRTUALITY OF SPACE AND SIMULATION THEORIES** |
| 21st century AD- | | | | | | | | |

# 3. CONCEPT OF SPACE AND REALITY

In this part of the thesis, the concept of reality is defined firstly and the breaking points where reality is related to space are explained. Afterwards, the relationship between the last refraction and post truth was put forward to explain the 'Hyper Reality' of the Space through Post-Truth Approach' in the 3.3.3 part of the thesis.

## 3.1. THE CONCEPT OF REALITY

In order to make sense of the relationship that space establishes with 'reality', it is necessary to explain its relationship with the concepts of reality, being and truth in order to reveal the concept of reality.

Although truth and reality are considered as different concepts in English, it is seen that these concepts are in relationship with each other in Turkish. 'A situation that exists as an object or an attribute, whose existence cannot be denied, is a fact, a fact. Genuine, authentic. Basic, principal. As in nature, reflecting nature as it is. Real situation, reality. The right thing. It is used in the meaning of existing as opposed to thought, designed, imagined' [66]. Reality is defined in the form; 'all that is real, all that exists, truth, reality' [67]. This meaningful confusion in the Turkish language is very important in the context of this thesis in terms of discussing the reality of the space.

While the relationship established with reality develops through the acquisition of knowledge, this process is seen as the most fundamental feature that distinguishes human beings from other living things. Human beings want to rationally verify and understand the truth of the knowledge acquired through experimental or mental means [66]. Reality and truth have been among the most heated debates throughout the history of philosophy. Although the concepts of 'truth' and 'reality' seem to be synonymous structures that give the meaning of reality and truth, it is known that there are philosophical and linguistic distinctions between these expressions. For centuries, the fact that words of truth and reality are regarded as expressions of the same meaning and this have shown the difficulty in the distinction between these words [68].

The concept of reality, which is characterized by terms such as genuine, concrete, emerged, existing and positive, is explained in the form of reality, real one, all things that exist, truth [5]. In the Encyclopedia of the Terms of Philosophy, reality expresses ‘all that exist in concrete and objectively independent of human consciousness, and is used as the opposite of non-existent [69].’

According to Hançerlioğlu, the real is used in the sense of being concrete and objectively independent of consciousness, and in the History of Thought, truth is used as synonym with reality [70]. Reality, defined by terms such as genuine, concrete, emerged, existing and positive, has been defined as the real intellectual according to Hegel. According to Heidegger, the search for truth explained as trying to understand what the actual source and basis of all objects and things is [60]. With this approach, it has been deemed necessary to examine the Problem of Being in order to define reality.

The main problem of ontology, which is a branch of philosophy that questions existence, is the question of whether ‘being’ exists. The problem of being was first dealt by Parmenidas and Aristotales. According to Parmenidas, Being, which means what exists or is said to exist, means to the Aristotle what really exists as the opposite of extinction [69]. With the assumption that the only truth is an existence, the Eleasers have argued that everything we perceive with our senses consists of illusion because the real cannot exist [70].

Being is considered as in two ways real being and imaginary being in philosophy. The real being is what takes its reality from objects, events and people, and is in space-time, considered as particular and unique. The imaginary being, on the other hand, is out of space-time, imperceptible to the senses, has no tangible reality; the concepts of mathematics and logic, which are values in this sense, have been defined as imaginary beings [69].

The understanding of existence in the history of thought of the Western world, which is rooted in ancient Greek philosophy, represents an ontological attitude and within this tradition, there are three basic assumptions about existence. These are; the assumption that being is the most universal concept, the assumption that the concept of being cannot be defined and the assumption that the concept of being is obviously the most understandable [71].

The entity, which is assumed to exist spontaneously until the age of Enlightenment, has only been tried to be understood. Along with the Enlightenment, discussions about existence and

reality have changed direction. In Cartesian model of Descartes, the existing ones have become reality as the design of human mind. As a result, subject-dependent reality has become the basis of this period's understanding of space. The understanding of being came to the first breaking point with Cartesian model of Descartes. Since being can no longer exist independently of the human mind, as its reflection the reality has become the spatial reality of space.

In the contemporary period, existence and reality reached the second breaking point. Heidegger's way of dealing with existence, the time and experience-based reality has emerged. The reality of space has gone beyond the reality that the human mind has designed and reduced to parametric values. Space and its reality have become the space that is experienced, perceived, lived and produced.

The third and final reflection on the reality of space began with Baudrillard's simulation theory, virtuality in architecture and post-truth debates in the architectural literature. According to Baudrillard, reality has been lost in the simulation universe and it has been replaced by hyper-reality. In the age of post-truth, reality stands where it is, but something surreal, which is pretended to be real even though it is not real has replaced it.

When the three different approaches determined in the historical process of defining the space and the conditions in which these approaches arise are considered in the context of the definition of reality, the intersection points are given in Table 3.1.The relationship that space establishes with reality was first examined in the Cartesian method in the context of the reality of the place connected to the subject in the Modern era. Then, the reality of the space is examined within the space experienced by the subject. Finally, the reality of the space is examined within the framework of Death of Reality theory.

Table 3.1. The reality of space in historical order. Constituted by author.

| THE REALITY OF SPACE IN HISTORICAL ORDER | ANCIENT AGES | | MIDDLE AGES | MODERN PERIOD | | CONTEMPORARY PERIOD | |
|---|---|---|---|---|---|---|---|
| | Pythagoras | Plato and Aristotle | Vitruvius | Scholastic Thought | Renaissance and Enlightenment | Modernity | Contemporary World | Simulation Theory |
| 6th century BC | **MATHEMATICAL ORDER**<br>**As the basis of existence, numbers have spatial magnitude and these numbers form the space of the universe.** | THE REALITY OF SPACE<br>ABSTRACT CONCEPTS AND IDEAS<br>mathematics - geometry- symmetry | | | | | | |
| 4th century BC | | **GENESIS AND KHORA**<br>**Space is a reflection of ideals (genesis) and takes its reality from basic forms with four basic elements (Platonic forms) Space is formed by geometry in the world (Aristotle)** | | **COMBINING ANCIENT ONTOLOGY WITH CHRISTIANITY**<br>**Celestial space; math and order**<br>**heavenly space; divine space where ideals exist** | THE REALITY OF SPACE<br>REASON AND INTELLECTUAL SUBJECT<br>absolute space and spatial space<br>**THE CONNECTION OF ANCIENT ONTOLOGY WITH REASON**<br>**The ABSOLUTE SPACE created by the human mind and the mathematical integrity of space. Space is only possible with the human mind.** | | |
| 1st century BC | | | **SYMMETRY**<br>**The symmetry as the essence of space - the relationship between two measurable quantities to a common measure.** | | | | | |
| 5th - 15th century AD | | | | | | | | |
| 15th-19th century AD | | | | | | **PRODUCTION OF SPATIAL SPACE WITH MIND**<br>**The intellectual subject who produces space. Classification of space.** | | |
| 19th-20th century AD | | | | | | | | |
| 20th-21st century AD | | | | | | | THE REALITY OF SPACE<br>Subject-Based Reality<br>**SPACE EXPERIENCE AND EVENT**<br>**The subject-space relationship and the subject creating the space** | THE REALITY OF SPACE<br>REALITY SEARCH IN VIRTUAL SPACE<br>**VIRTUALITY OF SPACE AND SIMULATION THEORIES**<br>**Loss of reality in space** |
| 21st century AD- | | | | | | | | |

## 3.2. THREE APPROACHES THROUGH THE REALITY OF SPACE

When the development of the concept of space in the historical process is examined, three important approaches have been identified. These approaches are grouped under three main headings. First of all, the effects of the Cartesian thinking model, which started with the Enlightenment, and that the human being sees himself as the ruler of nature. Subsequently, with the influence of contemporary thought, experience, the relationship between the subject and the object, and consequently the fundamental changes in the act of creating the space of the subject and finally as a result of the simulation era which is assumed to lead to the loss of reality are discussed under these three headings. Then, the different approaches determined and the development of the space in the historical process were evaluated with a table.

### 3.2.1. Concept of Reality through 'Cartesian Thought'

The first break in the concept of reality, used as a synonym for being, differs from the Middle Age in the Enlightenment with the view that the human mind can interpret everything despite nature. The period of Ênlightenment considered as a process of modernization; It is defined as the age of reason in which human beings begin to exist with their minds against nature.

Until the Cartesian approach that emerged during the Enlightenment period, the existence of being independent of the human mind was not discussed. Parallel to the view of the ancient Greek thinker Parmenidas, there is already what exists, Aristotle argued that the existence of what exists is indeed as opposed to extinction. On the other hand, the Pythagoreans claimed that everything in nature was reduced to numbers and that it was real, which was explained by mathematical rules, harmony and various proportions. From these approaches, it seems that ancient Greek philosophers tried to understand the existence that is thought to exist. Plato and Aristotle's thoughts were effective until the 14th century [72]. In the Middle Ages, dominated by the scholastic thought system, the Pagan gods of nature were replaced by human gods, and it was accepted that the Christian church set the right and true for the people. The space boundaries of the Middle Ages were defined as a defined space independent of the subject, whose aim was to reach the God [37].

In the Enlightenment period, the reality, which is thought to exist independently of the human mind, began to come under the domination of the human mind. Rene Descartes (1596-1650), one of the most important thinkers of the period, developed the Cartesian method, which is considered as a new method for exploring universal science.

> Yes, man's aim is to achieve happiness. We must use our minds to ensure our happiness. Well, how should this mind operate with a force capable of achieving this goal? Our minds are messy. Aristotle's logic is not enough for us to work it properly. We need to find a new way to work our minds. This method should be a mathematical method. Finding and separating the main thoughts that make up an idea by dividing and breaking that idea with this method, then combining these main thoughts and re-creating that idea. (analytical geometry). So if I chase the order meticulously, if I can avoid thinking of a wrong idea as correct (in other words, if I don't mix a wrong idea between the chain of thought), there will be no information that I will not find, no matter how secret. There is only one thing that is certain: to doubt the truth of anything. To doubt is to think. So there is no doubt I'm thinking. Thinking is being. So there is no doubt that I exist. Here is my knowledge: I exist. Now I must obtain all other information from this sound knowledge [37].

According to Hançerlioğlu, this method of Descartes made him the founder of new age philosophy. What is the purpose of a human being as a thinking being? As a result, he explained that the achievement of happiness was to live well, and to live well, to reach the knowledge of happiness. Descartes, looking for this information in philosophy, argued that as the beginning of philosophy, a morality regulating life should be acquired [37]. For this, he explained the principles of human knowledge in his book, Principles of Philosophy.

Descartes who said; ‘First of all the seeker of the truth should be suspicious about all the objects to the extent that he can afford in his life’, thought that hastily made decisions put stones in front of the truth. ‘These are the principles that I use in matter-free or trans-physic objects, and I explicitly deduce the principles of physical objects from these principles’. Descartes, in order to prove all the things I will draw from the Principles, I also do not accept any principles that are not adopted in mathematics in physics: in fact, these principles are also sufficient, because natural phenomena can be explained to them [73]. According to Tschumi, the understanding of time and space categorized by the classification of sensory knowledge by Aristotle came to an end with Descartes [74].

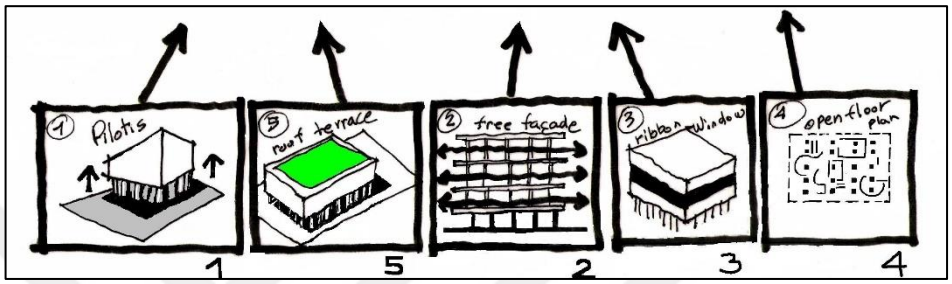
The Cartesian conception of space is based on Descartes' principle of separating what is thinking res cogitans and what is propagation res extense [47]. With these divisions, which form the principles of Cartesian thought, space is reduced to things with diffusion, and space, which is transformed into a stationary thing that can be designed, is composed of lines, coordinates and surfaces [48].

With the effect of Cartesian vision, space is defined as metric measurements that can be designed as a product of human mind. In the Cartesian thought system, which was identified as an important breaking point in the discussions about the reality of space, space has become a mathematical absolute space, which can now be designed with the human mind. The Cartesian thought system, which was effective until the modern era, was the main component of modernism and enlightenment philosophy which tried to solve the problems of modernity within modernity. In fact, space is thought to be the result of a production process [75].

Le Corbusier's Villa Savoye (Figure 3.1.) is an example of space production of the Cartesian thinking system. Villa Savoye, the most famous of the many similar villas he built between 1920 and 30, incorporates all the 5 points of architecture principles of the architect himself. The 5 parameters that the architect defends and the structure should have; pilotis, roof terraces, a free plan, free facade, and the ribbon windows have been revealed in this villa [76]. These five elements are expressed by the architect through reason and expressed as essential typologies for space [77]. The human body and behavior have been standardized by putting people in the center, and the reason that was used as a tool in this procedure, has also been used to standardize the elements in the spaces [78]. Thus, the space itself is perceived as producing the same reality for each user and is represented by Le Corbusier in the context of becoming an objective data for subsequent structures.

(a)

(b)




(c)

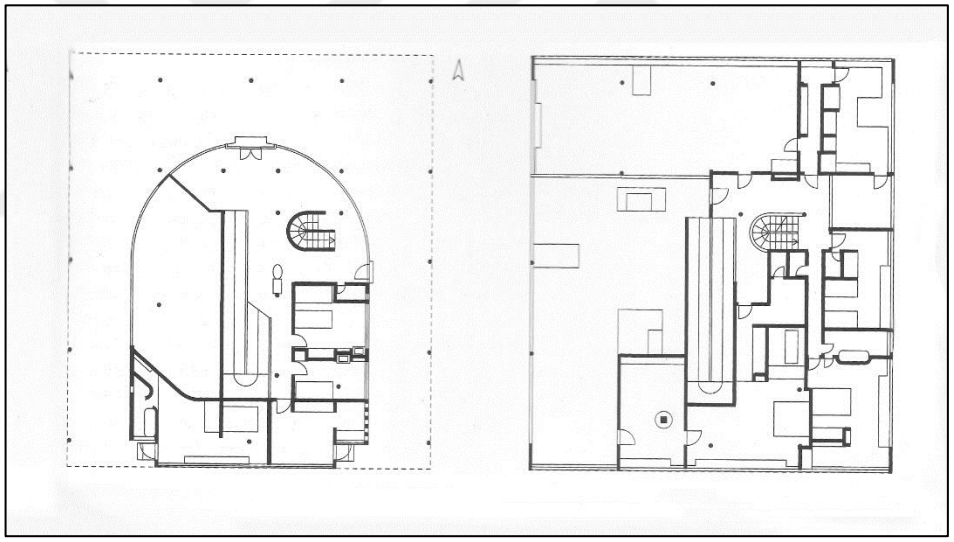


Figure 3.1. The relation between Villa Savoye and Le Corbusier's architectural thought. (a) Photograph of Villa Savoye [79]. (b) '5 points of architecture' sketches by Le Corbusier [80]. (c) Floor plans from Villa Savoye [81].

When the reality of the space is taken with a Cartesian approach, as seen in Le Courbusier's design, the spatial existence of the space is established and the standard behavior model of the user is tried to be provided by Modulor, which is transformed into principles by the architect. So that space is designed to handle user's life, habits and behaviors as computable data programmed like a machine. When the relation of space with reality is considered in this context, it is computable mathematical proportions, computable behaviors, computable habits, and the design and solutions to respond to them.

### 3.2.2. Concept of Reality through 'Experience'

> Hegel showed his greatest expansion in classical teleology. He ... completed on-theology. The other, Heidegger, for example, went back to all the opposite sentences that dominated the aesthetic history, with all its details, including form and content [82].

Philosophy, whose purpose is to explain it by asking questions that question the meaning of being, begins with being. According to Heidegger, in the history of philosophy, the question 'What is existence?' is confused with the question 'What are objects or things?'. Unlike the way classical philosophy deals with the question of existence, Heidegger says, 'Being must be separated from all kinds of objects. According to him, being is not an object or something. Objects or things consist of existing objects such as trees, tables, houses while being is not a house or a tree. According to him, being is the one that cannot be expressed as ontic appearance. Distinguishing reality from the ontology of being, Heidegger says, 'It is another thing to tell stories about the existing, it is much more to grasp the existing within its own being' [60]. Heidegger, who starts out with the view that man perceives and thinks that he is a historical being within a context, argues that human being is perspectival and therefore human knowledge is not final and complete. The finiteness of human knowledge is not capable of clarifying the existence of assets [83].

Heidegger does not find it acceptable the modern metaphysics' consideration of elements such as art, history, human, god and language as computable objects [84]. With this approach, he argues that modern metaphysics considers mind as the only form of thought, which causes the transcendent dimension of reason to be ignored. According to him, it cannot be thought from their own starting point, the existing ones can be thought only in the relationship it establishes with the being and therefore the entity cannot be explained independently of the relations. Gür expresses the Heidegger metaphysics questioned in this network of relations as follows: It can be argued that those who exist in Heidegger find meaning in the relations between being and Dasein, being and logos, being and identity, and being and nothingness [85].

What is being, which is the fundamental question of philosophy that treats existence differently from scholastic thought and Cartesian duality? When searching for answers to the question, the thinker avoided giving the subject temporal and physical certainties.

Heidegger refrains from giving temporal and spatial certainties to the subject, which takes existence as distinct from the dual contrast of scholastic and Cartesian ideas and seeks to answer the question of what is being, the fundamental question of philosophy. According to him, being is a state of opening, the state of not to be hidden. He used the concepts of Aletheia logos and phusis to ground this view [84]. According to Tokat, when we look at within the framework of these three concepts being is evaluated as truth, mind, nature [86].

Heidegger saw the essence of man's existence as being in the world, and the meaning of being depends on revealing the possibilities of existence in the world in which man exists [87]. With Heidegger, the connection with reality is handled in relation to the experience of the subject. The truth is explained only by the subject's retention and taking root. Subject and object, space and human experience that require each other have made each other a condition. In this period, the reality of space, spatial understanding of the mind produced by the proposition of the Cartesian method has been replaced with the understanding of the experienced space [88].

Lefebvre's perception of triple space, which he classifies as perceived, designed and lived space, argues that space does not exist spontaneously and in isolation, but exists as a dynamic, vivid and historical concept [48]. Lefebvre, who criticized the reduction of space to a physical object, discussed the reality of space. Stating that Cartesian understanding of space is an important turning point in the discussions about space, the author argued that with the Cartesian thinking approach, space is objectified to the subject in the domination of the absolute. According to him, the reality of an objectified space without energy is located in an unquestionable place [62].

Lefebvre interpreted the view of Heidegger's space as being the foundation of human existence in the world (in der Velt sein), and we emphasized that there would be a significant rupture between our perception of space and our design if we reduced the space to the geometric space with its extension only [48]. For Lefebvre, which defines mental logical and mathematical space as the ideal space defined by categories, the real space means space belonging to social practice [62].

Examples of the space and experience where the reality is reconstructed are the Therma Vals [89] structure designed by Peter Zumthor for the Graubünden region of Switzerland in 1996. The building is a spa center located in the area where the region has hot water reserves. The

user circulation network designed in the center is connected to various functional areas. Access to the functional areas of the spa incorporates many spatial constructs that allow the user to establish an experiential relationship with Zumthor [89]. Light shade, openness closedness, various sound ranges (Figure 3.2.) And similar physical sensations are presented to the user, this experience adds to the user experience. When entering the interior from outside, the architect consciously designed differentiation of light intensity, color change and contrast created by light, volumetric comparisons, variable moisture, odor and sound [90] [91].

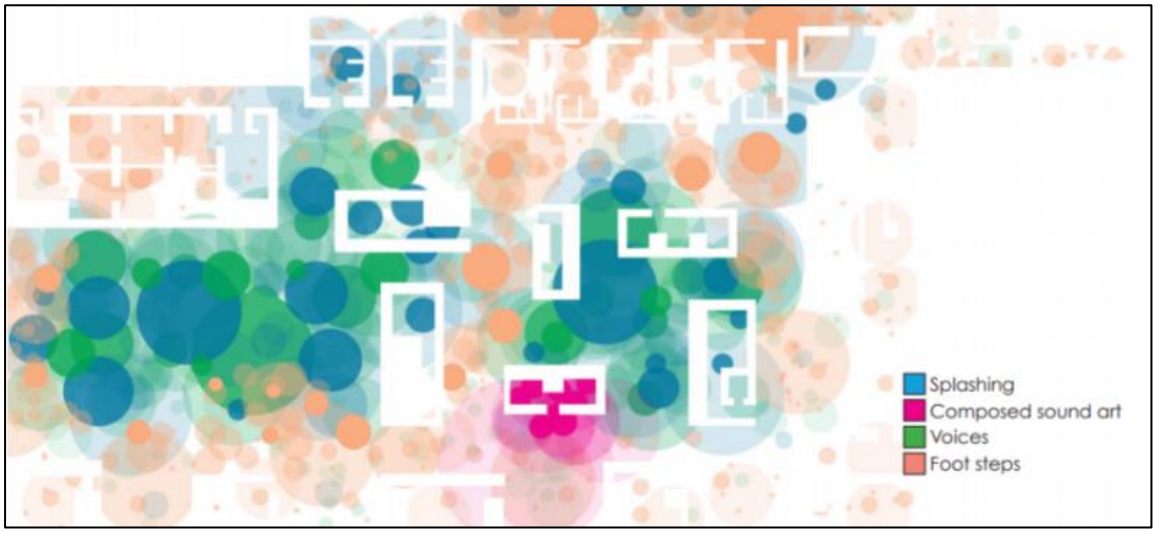



Figure 3.2. Mapping with phenomenological approach. Visualization of the experimental sound analysis through Therme Vals ground plan [90].

Therma Vals offers a Cartesian reality outside the user's experience as a space, but the real reality of the spaces is re-established with the new realities that the users have built in the space (Figure 3.3.). Contrary to the Cartesian space approach, the design approach, which allows the user to make sense of the space with his own experience, has been reacted.

(a) (b) (c)

Figure 3.3. Therme Vals from perspectives of several photographer. (a) From the perspective of Antonio Choupina [92]. (b) From the perspective of Shota Vashakmadze [93]. (c) From the perspective of Fernando Guerra [94].

### 3.2.3. Concept of Reality through 'Death of Reality'

> Truth is trying to conceal that there is no truth – the simulac has no chance to conceal the truth. Simulation means truth [95].[6]

In this last stage of capitalism, (Baudrillard calls it a new world disorder rather than postmodernism). The French philosopher, sociologist and theorist Jean Baudrillard, who critically treats the postmodern Western world, has developed the most striking and extreme postmodern theory ever developed (Figure 3.4.). These theories have been quite influential especially in the theory of culture and in the debates about today's media, art and society [96]. Baudrillard transformed 'the concept of simulation', which he concentrated in the 1970s, into simulation theory in the 1980s, and in the framework of this theory opened the discussion of the theory of loss of reality. According to this theory, which the thinker calls Simulation Theory, especially Modern Western societies have lost their inner economic, social, cultural, political dynamics and their claim to be a role model of progress and as a result, they suffer an inward collapse [97]. Modern societies provide the ability to overcome

[6] Baudrillard was named himself as 'Ekleziast' in his book that was referred at the beginning of this chapter. For further information: Adanır O. Simülasyon kuramı üzerine notlar ve söyleşiler. İstanbul: Hayal Et Kitap; 2008.

their crises through a vicious circle that is constantly resurging in itself, indicating that a simulation period in which reality can no longer be discussed [98].


Figure 3.4. Timeline of major theoretical works by Baudrillard. Between 1968-2002 [99]. Constituted by author.

According to Baudrillard, the reality that has been produced in the last century and transformed into a principle by the modern world has disappeared. It is futile to strive for

the reality, which is tried to be kept alive as a reference and whose principle is now dead [98]. According to him, in this period, the truth is now produced by the miniaturized cells, matrices, memories and command models, and with these models an infinite number of realities can be reproduced. From now on, truth does not need to have a rational appearance, because it is not in a state that can cope with real ideal or negative processes. The truth now has an operational look. In fact, he doesn't even call it real, because there's no imagination around it. It is a true synthetically produced hyper-reality that emits combinatorial models in a hyperspace devoid of atmosphere [95].

- **Simulacr:** A view that wants to be perceived as a reality.
- **Simulate**: Present something that is not real as a reality.
- **Simulation:** Artificial reproduction of a tool, a machine, a system, a phenomenon-specific way of operation by means of a model or a computer program for the purpose of examining, showing or explaining [95].

Dissimulate, pretend not to have what is possessed; simulating is to pretend to have something that is not owned. Hiding emits an asset (not currently present) and simulates an absence (not currently present). But this is even more complicated than you thought. Because simulating is not pretending to be. Feindre or conceal (dissimulant) cannot harm the principle of reality, because there is always a clear, concealed difference between simulating or concealing and reality. However, simulation tries to eliminate the difference between this reality and the fake and the reality and the imagination. It is no longer possible to see the difference between reality and fake, because simulation replaces reality [95].

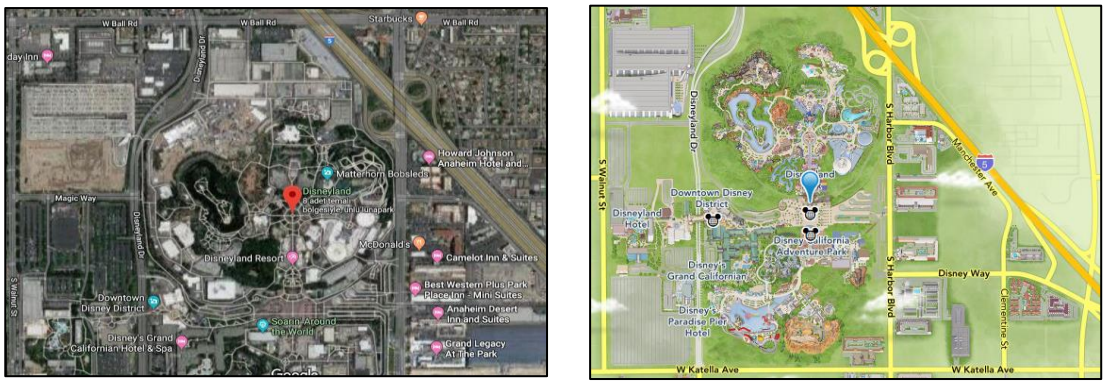
Simulacr that want to be perceived as a substitute reality are simulations of reality that are reproduced beyond imitation. According to Baudrillard, in the second phase of capitalism, the development of technology changed daily lives, transformed human relations, and as a result the reality principle was lost in the western world. As a result, Baudrillard defines the hypothetical, simulation of the derivation of reality through models through a lack of origin or reality [95].

Unlike the modern world, Baudrillard reads history in a simulacr system and talks about four different simulacr stages. First, it has divided the law of value into phases: a natural phase (use value), a commercial phase (exchange value), a structural phase (indicator value), thus determining the natural, commercial and structural laws of value, and Baudrillard, who

spoke of an additional fourth law, emerged as a part of the simulation world. At this stage, nothing can be arranged with a Cartesian logic and good is not the opposite of evil. According to him, things, indicators and actions reproduce themselves forever when they get rid of their imagination, concepts, essences, values, references, roots and aims [100].

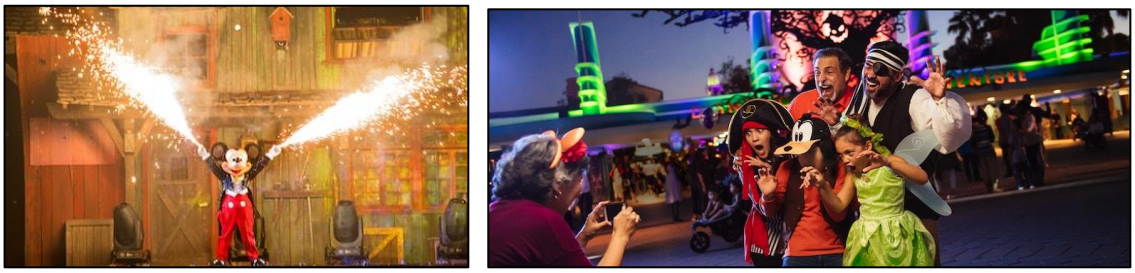
Baudrillard, who rejected the idea of progress in history, thus argues that none of the developments in the Modern period are progress. For Eco, the hyperreal is the virtual environments in the US, which are mummy museums where copy and original, yesterday and today, are mingled, and sanctuary paradises such as Disneyland, Disneyworld, and Las Vegas [101]. Disneyland, a reflection of America, which Baudrillard sees as a land of virtualities, needs to be examined in order to make the simulac stages more understandable.

For Baudrillard, 'Disneyland is the perfect model in which all simulac patterns are intertwined'. Disneyland primarily: Pirates, cartoon characters, the world of the future and so on. As can be seen in the images below, even Disneyland's regional map (Figure 3.5.) is a map of a fantastic world, cartoon characters are puppets (Figure 3.6.a) that communicate with the ideal world, and pirates can be found in everyday life. (Figure 3.7.b). The thinker has attributed the fact that what attracted crowds to Disneyland was in fact a reflection of miniaturized America. The imagination Disneyland offers is neither real nor false. This is a deterrent machine designed to reproduce the real called fiction symmetrically to it [95].




(a) (b)

Figure 3.5. (a) Disneyland from google maps. (b) Disneyland site map [102].



(a) (b)

Figure 3.6. (a) Puppet version of Mickey Mouse [102]. (b) Staff that wearing cartoon character's costumes [102].

According to him, America, which was constructed in Disneyland, is in fact morphological and miniature models of objective America, which contains the structure of the crowds, and these models are re-produced and exalted through cartoons. The thinker argues that this exaltation is trying to conceal something, that the concealed thing is a third stage simulator that tries to conceal what the real America looks like. For this reason, he argues that the America itself belongs to a hyperreal and simulation universe [95]. Crowds leaving Disneyland believe that the fantastic world is their own world (Figure 3.7.).


Figure 3.7. A photo from the Disneyland's interior [102].

In this simulation universe where reality can no longer be discussed, the hypereal which replaces reality is both an ideological and an objective world. As a result of this, it is thought that the reality of the space, which is detached from its roots, becomes the focus of the discussions of architecture and virtuality.

### 3.2.4. Chapter Evaluation

When the development of space in the historical process is examined, three different approaches are presented in Table 2.1. In order to understand the relationship between space and reality, three different views have been determined under the section ‘Concept of Reality’ by considering these different approaches and they are shown in Table 3.1. These prevailing views were interpreted under the title ‘Three Approaches through the Reality of Space’. These sections are reflected in Table 3.2, respectively.

The first of these approaches, the ontology of ancient times, and the result of the merger of reason with the Age of Enlightenment was found to coincide with the period. As a result of the Cartesian method of Descardes, which influenced the dominant view of this period, space entered into the production of human mind. On the other hand, it is seen that the reality that associates with being turns into objective reality which is designed with human mind and explained by mathematical rules. The spatial existence of space has now established its reality on earth. The spatial and absolute reality of space has now become an absolute space that can be designed. This section of the table covers the modern period.

The second approach appeared to be the dominant view of Heiddeger's new approach to the ontology of existence and the definition of reality. While with Heidegger the connection of reality was dealt with in relation to the experience of the subject, it was seen that the space experienced changed under the influence of the concept of time. Lefebvre made the most significant space classifications of this period and it was found that the experimenter guided the reality of the space.

The third and final break on the reality of the space was found to coincide with the contemporary period in which the debates of virtuality were held in architecture, which is the subject of the contemporary period. The effects of Baudrillard's views on the definitions of reality and space, which are the main actors of the reality debates of this period and which define the current period as a simulation universe and produce the theory of death of reality, are evaluated in this section. As a result, the hyperrealism of the virtual space appeared to be the dominant view in this section.

Table 3.2. Three approaches through the reality of space. Constituted by author.

| THREE APPROACHES THROUGH THE REALITY OF SPACE | ANCIENT AGES | | MIDDLE AGES | MODERN PERIOD | | CONTEMPORARY PERIOD | |
|---|---|---|---|---|---|---|---|
| | Pythagoras | Plato and Aristotle | Vitruvius | Scholastic Thought | Renaissance and Enlightenment | Modernity | Contemporary World | Simulation Theory |
| 6th century BC | **MATHEMATICAL ORDER**<br>**As the basis of existence, numbers have spatial magnitude and these numbers form the space of the universe.** | | | | **FIRST BREAKING POINT IN THE REALITY OF SPACE**<br>**DESCARTES AND CARTESIAN SPACE**<br>**the spatial existence is the reality of space** | | | |
| 4th century BC | | **GENESIS AND KHORA**<br>**Space is a reflection of ideals (genesis) and takes its reality from basic forms with four basic elements (Platonic forms) Space is formed by geometry in the world (Aristotle)** | | **COMBINING ANCIENT ONTOLOGY WITH CHRISTIANITY**<br>**Celestial space; math and order heavenly space; divine space where ideals exist** | **THE CONNECTION OF ANCIENT ONTOLOGY WITH REASON The ABSOLUTE SPACE**<br>**Created by the human mind and the mathematical integrity of space. Space is only possible with the human mind.** | | | |
| 1st century BC | | | **SYMMETRY**<br>**The symmetry as the essence of space - the relationship between two measurable quantities to a common measure.** | | | | | |
| 5th - 15th century AD | | | | | | | | |
| 15th-19th century AD | | | | | | **PRODUCTION OF SPATIAL SPACE WITH MIND**<br>**The intellectual subject who produces space. Classification of space.** | **SECOND BREAKING POINT IN THE REALITY OF SPACE**<br>**HEIDEGGER AND EXPERIMENTAL SPACE**<br>**the experience of space as a being is the reality of space** | |
| 19th-20th century AD | | | | | | | | |
| 20th-21st century AD | | | | | | | **SPACE EXPERIENCE AND EVENT**<br>**The subject-space relationship and the subject creating the space** | **VIRTUALITY OF SPACE AND SIMULATION THEORIES**<br>**Loss of reality in space** |
| 21st century AD- | | | | | | | **THIRD BREAK POINT IN THE REALITY OF SPACE BAUDRILLARD AND THE LOSS OF REALITY**<br>**call to return to the Cartesian space against the hyper-reality of the virtual space** | |

## 3.3. POTENTIALS: EVOLUTION OF HYPER-REALITY TO REALITY

Baudrillard's theory of death was determined as the theoretical basis of the thesis in order to examine the ontic reality of the space, which is the main subject of this thesis. In this thesis, the reality of the space is evaluated through the existence of the space. Spatial space, experience-dependent space, hyperreal space and the relationships that these spaces establish with reality are summarized and tabulated in tables. In this section of the thesis, Baudrillard's hypothesis of the death of reality is discussed with the theory and post-truth approach.

### 3.3.1. Hyper-Reality

> Henceforth an entity with various views; there will be no mirror / reflection (metaphysics) specific to reality and reality. From now on, there will be no fictitious unity between reality and reality. Because what is called genetic miniaturization is a dimension unique to the simulation universe. Today, the real is now produced by miniaturized cells, matrices, memories and command models. Thus, an infinite number of reproduction of the truth is possible. We will no longer need a rational truth, because the 'real' is not in a position to cope with ideal or negative processes. There is now an operational fact. In fact, this is not the reality because it lacks a vision that envelops it. Synthetically produced reality, aka hypereal, is similar to combinatorial models in a hyperspace of this atmosphere [95].

The hyper-reality that Baudrillard dealt with within the framework of the simulation theory developed in the 1980s is described as a synthetic reality with no relation to the reality in the simulation universe [69]. Unlike simulation, the substitute simulation emulates the truth and replaces it with a hyper-real (Figure 3.8.). According to Baudrillard, the hyper-real, which is indistinguishable from the real object, can be reproduced and reproduced without origin and reality [95]. For Eco, the hyperreal is the virtual environments in the US, which are mummy museums where copy and original, yesterday and today, are mingled, and sanctuary paradises such as Disneyland, Disneyworld, and Las Vegas [101]. In the 20th century, he stated that since there was no absolute reality, reality was changed and even transcended into a hyper-reality [103].

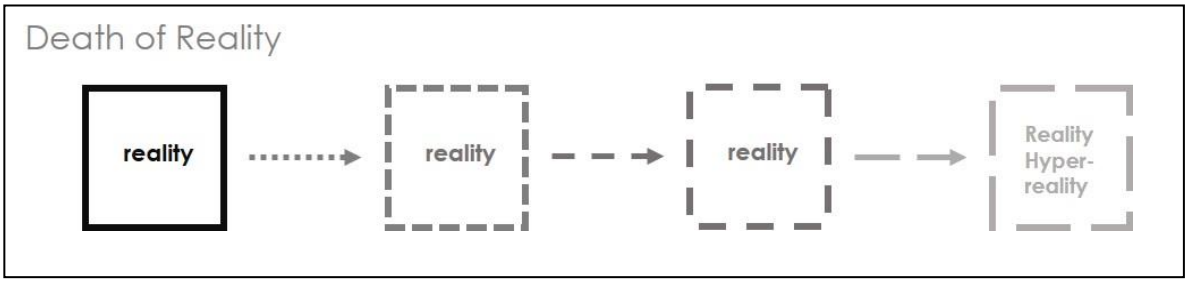



Figure 3.8. Diagram of reality to hyper-reality. Drawn by author.

Baudrillard, who reads the simulacr stages with the laws of value, speaks of the first simulac stage, which is a natural stage from the Renaissance to the industrial revolution, the commercial stage that covers the industrialization period, the second simulacr stage, and the current stage in the third stage. Here, the display value is highlighted and the real object and the simulation cannot be distinguished. In the simulation universe, simulation which cannot be differentiated from the reality by which the indicator value is highlighted by copying the truth is evaluated as hyperreal. Hyper reality is associated with space in Baba's work 'A study of hyperreality: The case of Istanbul Galleria'. The Galleria shopping area, which is the subject of the study, is considered as an example of the 3rd simulac stage which Baudrillard mentions as the current stage. The Galleria shopping mall (Figure 3.9.), Which was the subject of Baba's work and was built in Istanbul in 1988, was designed as a reflection of The Galleria shopping center in Houston [104].

Figure 3.9. Current view of Galleria Shopping Center [104].

In the modern era, the purpose of shopping spaces, where consumption has become an objective in itself, provides the basis for the socialization needs of people arising from the need to communicate and get together, beyond shopping [104]. The subject of Baudrillard's shopping centers in the context of consumer society is modern man. According to him, the human being, which is regarded as the fossil of the golden age of modern times, is equipped with a principle of rationality. He explains that this first person leads him to seek his own happiness without showing the slightest indecision and to give priority to the objects that will give him maximum satisfaction [105]. Modern human, aiming at achieving happiness, is equipped with habits of consumption society.

In the study of Baba, shopping centers, which are thought to have the potential to change the various activities of urban life, socializing and spending time together with consumption society habits, were evaluated as an important example. The fiction of the Galleria shopping center, which was evaluated in this context, was taken as a representation of the representation. Its relationship with reality is considered to be the product of the third simulacr phase, which is described as shaping reality rather than starting from reality [104].

Galleria, a shopping center in Istanbul, which was designed as a simulation of the city center imported from the west, was evaluated as a representation of representation by Baba. Its purpose is not to model the city center, but it has already created a shopping center model that replicates a representation that models the city center. It is not regarded as a copy of Galleria (Figure 3.10.a) in Houston, which is simulated as another place with the spatial features of the city center, which provides people opportunities for gathering, socializing and shopping. Istanbul Galleria (Figure 3.10.b), as well as imitation of the simulation that imitates the city center, has become a hyperreal space, breaking away from the city center context [104].

(a) (b)

Figure 3.10. (a) Galleria Houston [106]. (b) İstanbul Galleria [107].

The simulation, which breaks from its own context and becomes a copy of the replica of the replica, is transformed into a hyperreality. In the simulation universe, the distinction between real and virtual cannot be made. In this simulac universe, where the reality is lost, the hyperreal that has emerged has now taken the place of reality.

### 3.3.2. Post-Truth

Although post truth as a concept is a term covered by political sciences, it has expanded its field of use as a concept in which other disciplines have been subject for more than 20 years. The most visible contribution to the expansion of this use is that Oxford Dictionaries chose post truth as the word of the year in 2016. The concept of post truth, which was on the agenda with the Iranian Contra Scandal during the Ronald Reagan period, has recently become a term used in academic studies, becoming more widespread as a result of political events such as the election of Trump as president and Brexit [108].

As a post-truth concept, it corresponds to situations where the concept of truth expressed in the previous section is no longer trivialized, devaluated and or ignored. Post-truth in the Oxford Dictionary; It is defined as relating to circumstances in which people respond more to feelings and beliefs than to facts [109]. In this sense, the post truth makes sense as a disregard for the consistent relationship between the existing reality and the judiciary. This statement does not lie against truth, Post-truth contains false statements, but the purpose is

not to lie. Instead, the goal in the post-truth puts the emotions and tendencies of the masses against the truth of a reality. In this understanding of the period, phenomena exist without shaping their existence according to objective data and objective entities, and the accuracy of this existence can be realized as much as the ownership of the masses [110]

The easiness of the Internet access by the masses has also facilitated the flow of information to the circulation. In this period, the relationship between the flowing information and reality is no longer a way of thinking, and the reality of the flowing information has become readable on how much the masses own this information [84]. With reference to Daniel Boorstin; 'Truth has been displaced by believability' [111].

it is the fact that the judges established by referring to the feelings, emotions, habits, and areas of conservation of the masses who have difficulty in rational thinking underestimate the reality to which the judiciary is bound. The tool used for this is defined as visual and linguistic tricks. Visual and linguistic representations that directly address emotions are used instead of factual and fact-matched data [110]. The reality of facts in the post-truth world order has been replaced by forms of representation that are thought to have a high potential for acceptance by the masses. These representations replace reality and are positioned as real [112].

Many of the above-described post-truth definitions and conceptualizations also refer to the orientation of a post-truth situation to a commodity. When literature review was made, it was seen that many books and academic studies related to post-truth were related to the definition of 'related to circumstances in which people respond to feelings and beliefs than to facts. However, the literature review found that this paradigm of post-truth is pejorative for another wing. In his 2018 book Post-Truth: Knowledge as a Power Game, Steve Fuller deals with post-truth in a different conceptualization than Oxford describes. In defining this approach, it started with the way of reaching the truth. According to him, the ideal that began in ancient Greece and Rome, continues to be an ideal tradition, and now it has become a social contract. On the other hand, this social contract creates the most probable environment for people who can speak freely, and this free speech environment can reach the masses realities. Although politics are the means by which the economy and knowledge complicate this distribution, this ideal is not only supported in the post-truth period, but also intensified according to Fuller [113].

According to Fuller, the shorter one thing lives, the longer it will last. The rapid entry of the fake into the circulation, which is characteristic of the post truth period, will potentially increase the rate of questioning of the fake and will emerge with the long life that is real due to the rapid disappearance of the fakes. Referring to Fuller Popper's falsifiable paradigm on scientific hypotheses, he emphasizes that the post-truth era potentially generates falsification as well as accelerates falsification [113].

The literature analysis reveals that the interpretation of the Post truth period is summarized in two main views. When these two approaches are re-read on being and reality, the first approach; the existence of a false representation of the asset and the reading of this situation as a loss of reality; where as the second approach acknowledges that false representations are replacing the reality, but sees potential in this fraud and in the environment in which it is produced (Figure 3.11.). These counterfeit forgeries also have the potential to be falsified according to the second opinion.. Increasing the rate of falsification is a more valid way to reach the reality of existence than the normative approaches that elite holds, and the post-truth environment provides this [113].

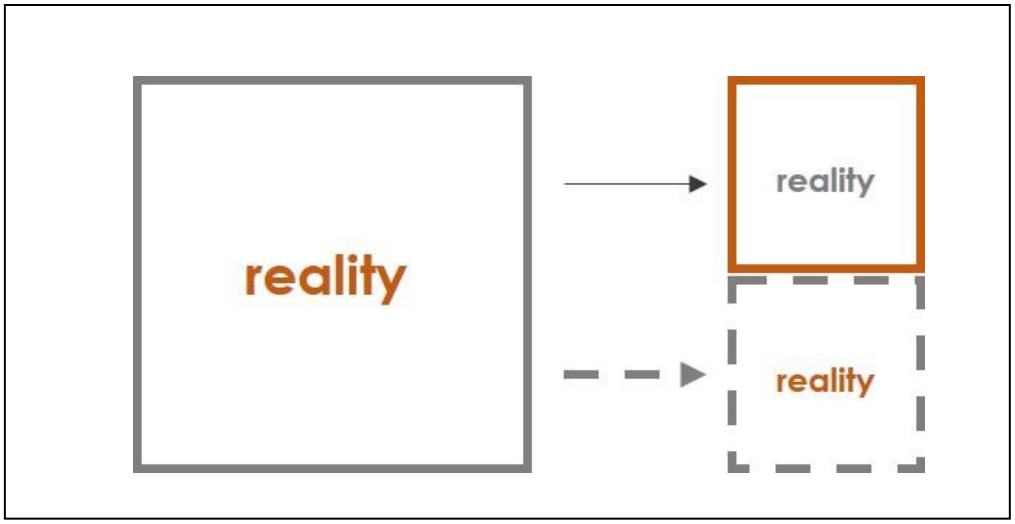



Figure 3.11. Diagram of reality to post-truth. Drawn by author.

### 3.3.3. Hyper-Reality of the Space through Post-Truth Approach

As a result of the literature study, a post-truth approach and a new approach to the hyper-reality of the space could be discussed. The fact that the concept of hyper-reality, which has lost its origins replacing the reality, has led to the discussion of the reality of the place. The concept of post-truth, which is based on the basic view that the concept of truth is not taken into consideration, refers to a surreal substitute for reality. When the reality approach is taken into consideration, the first approach that emerged regarding the post truth phenomenon; and the second one accepts this forgery, but there is potential for this forgery and its production environment. While the first case was based on the fact of loss of reality, it allowed the discussions of hyper-reality, while the second had the potential to be hyper-real, but it made us think of the potential for a new reality as a result of this being done consciously (Figure 3.12.).

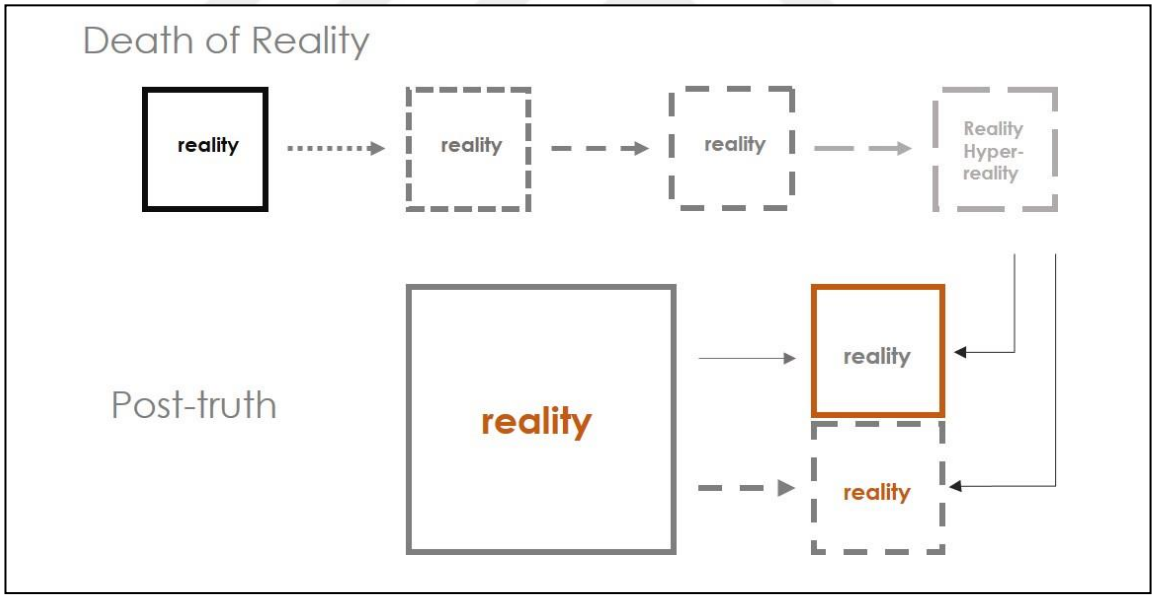



Figure 3.12. Diagram of realitionship between ‘death of reality’ and ‘post-truth’. Drawn by author.

While the discussion of the reality of space was walking along the axis of absolute spatial space, experienced space and virtuality, the idea that hypothetical space has its own reality has emerged as a result of research conducted throughout the thesis. This reality is dealt with as a hyper-real space which expresses a new reality that has broken from its roots. According to the first reading of the post-truth approach, the simulation age can be perceived as the

creation of the properties of a space by imitating technology with the possibilities; While the first approach represents the negative aspect of hyper-reality on architecture in the post-truth context, the second approach seems to give a positive reading of the hyper-reality on the post-truth context.

The discussions in the context of the reality of the space expressed for this thesis are the reality of Cartesian space, the reality of space based on experience, the reality of the virtual space that emerges when considered in the context of the theory of death of reality. In the contemporary era the debates on the reality of space express the debates on the reality of the virtual space. After the study of HWHWH, which is the field study of the thesis, is examined in the context of Cartesian space and space based on experience, the potential reality of the case discussed with Hyper-reality approach.

# 4. CASE STUDY: RE-THINKING ON EVOLUTION OF HYPER-REALITY TO REALITY WITH 'HOME WITHIN HOME WITHIN HOME…'

The ontic reality of the space, which is the main subject of this thesis, is discussed through three contemporary approaches that emerged as a result of literature research. Baudrillard's Death of reality theory was chosen as the theoretical model in order to understand the reality of the space. According to this theory, reality can no longer be mentioned because, in the age of simulation, reality has been replaced by hyper reality. The hyper real space, which has lost its reality in the simulation universe, has opposite spaces, just like Foucault's concept of heterotopia[7]. The heterotopias, which are contradictory places where daily lives are suspended and the meanings of space transformed, contain many categories in the same place in the same time period [114]. Foucault's heterotopy, which accommodates different opposing and incompatible entities, implies a spatial situation in which these entities can coexist. Heterotopia, which Foucault calls the opposite space, is an effective implemented utopia. According to him, heterotopia has a real position unlike utopias, which are unreal spaces with no real place [115]. In spite of the utopias created by planning, heterotopias are spontaneous physical or mental areas that occur without planning.

The questioning of the potential reality of the space was re-read through the 'Home within Home within Home…' artwork, which was selected in view of two possible interpretations of the hyper-reality presented in the previous section in the context of post-truth. For this purpose, firstly, the analysis method of the case study has been expressed and the art product chosen as the case has been introduced with the methods and approaches it has been selected in various places. Afterwards, the work within home within home within home was re-read in the context of contemporary approaches. These approaches are three different approaches that are considered in the context of the reality and definition of space; Cartesian thought system, where experience is the premise and hyper-reality approaches. This reading in the

[7] Heterotopia means 'displacement or misplacement of parts, deviation from the normal ontogenetic sequence with regard to the placing of organs or other parts, a condition in which normal tissue is misplaced, especially in the brain, so that masses of gray matter are found in the white matter. For further information: Heteretopia. [cited 2019 1 10 August]. Available from:https://www.thefreedictionary.com/heterotopia

context of Contemporary approaches, it was deemed necessary to test the suspicions that Hyper-reality is also a different approach. In this context, the last section 4.4. Evaluation: Hyper-reality to Reality focuses on the potential reality of three different readings in the context of Hyper-reality, which can be seen in a post-truth approach.

## 4.1. ANALYZING METHODOLOGY OF THE CASE STUDY

As stated in the 1.3 Methodology section of thesis, the interpretative method was used to discuss the relationship between the three different approaches grouped as Cartesian Thought, Experience, Death of Reality, which were put forward about space in the space reality intersection. HWHWHWHWH, being a replica of a real space, and the replica of the copies exhibited in various spaces, made it possible to re-read it with different approaches in the context of Cartesian Thought, Experience, and Death of Reality.

***The Relationship of Cartesian Thought- Home Within Home***

As a primary source, the application of the exhibition in different museum spaces has been examined through the information and photographs of the exhibition, and spatial dimensions of the space have been introduced, and the exhibition has been read through the understanding of Cartesian space. In this stage, the expressions of the artist and the curators of the exhibition were used as secondary sources.

***The Relationship of Experience - Home Within Home***

As the primary source for the experiential definition of the place, the comments of the internet users who visit and experience the place in social media are discussed. The aim here is to show that, unlike Cartesian reality, within the home within home exhibition, the users can create different realities than the artist intended. In order to understand the experiential structure of the place that changes according to the user, the expressions of the artist and exhibition curators were also used as a counter-reference.

***The Relationship of Death of Reality - Home Within Home***

For the hyper reality of space, the perception of space reality, which is formed by the first two approaches, is re-discussed through Baudrillard's theory of loss of reality. The first

approach from hyper-reality interpretations, which is the separation of reality from reality and the loss of reality as a result, is opened to discussion through the case study.

In the last part of the case study, 4.4. Evaluation: Hyper-reality to Reality section, with the interpretation of the situation where people experience it as real despite the fact that the post-truth approach of the case study is known to be imitating the spaces, the hypothesis of the new reality of the space, which is the result of the thesis, is discussed.

## 4.2. INTRODUCING: HOME WITHIN HOME WITHIN HOME

Do Ho Suh, the producer of the ‘Home Within Home Within Home…’ is known for his sculpture and artworks. His works based on the questioning of standard measures in public spaces include architectural elements. His work in canal spaces is to focus on the physical properties of the architectural elements in which he is concerned, creating concrete, metaphorical and experienced spaces. He was born in Seoul, South Korea in 1962 and moved to the United States while studying at Seoul National University. He continued his education at Bachelor of Fine Arts (BFA) from the Rhode Island School of Design and his Master of Fine Arts (MFA) from the Yale School of Art. After completing his education, the artist lived a traveling life and reflected his existence on nomadism to art practice. He continues to work in New York, London, and Seoul where he still lives. His work is in the collections of the Museum of Modern Art in New York, the Tate Modern in London and the Museum of Contemporary Art in Los Angeles [116].

Do Ho Suh's ‘Home Within Home Within Home Within Home Within Home’ (HWHWHWHWH) (Figure 4.1.), The other works produced by the designer; Fallen Star 1/5 (2008–2011), Home within Home 1/11 (2009), Gate - Leum version (2011), Seoul Home Seoul Home (2012), Bridging Home A Perfect Home: The Bridge Project (2012) As the last of his work has been the most prominent. Between November 2013 and May 2014, HWHWHWHWH was exhibited in the National Museum of Modern and Contemporary Art (MMCA), one of Seoul's most important museums [117].

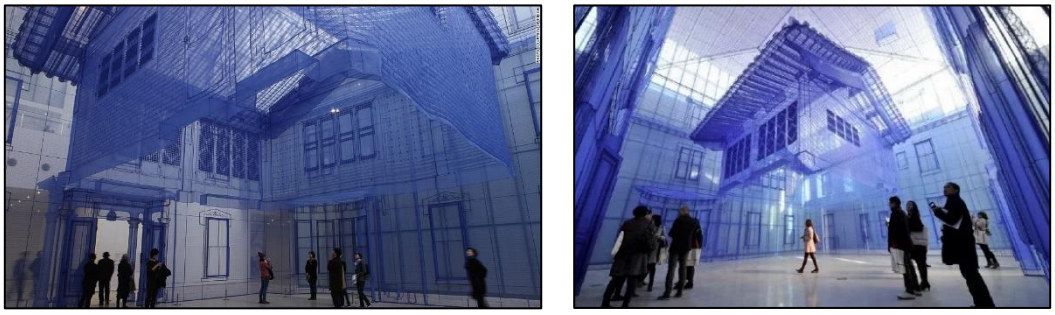
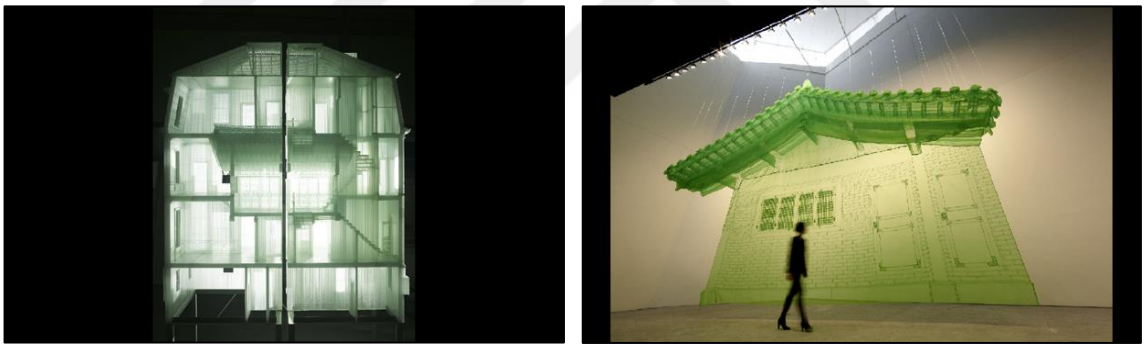


Figure 4.1. Home Within Home. Photos from the exhibition [118] [119].

The artist's Home Within Home Leum version was designed as a prototype of his latest work (Figure 4.2.a). The north wall of the house (Figure 4.2.b) is designed by creating a reflective effect on a surface with polyester material and metal armature. Another work he designed with similar technique was the entrance of the house (Figure 4.3.), which is one of the pieces exhibited as a continuation of the Home Within Home exhibition which was exhibited at Leum Museum in 2010 [120].



(a) (b)

Figure 4.2. (a) Home within Home, 1:11 Scale, Prototype Leum version 2009. (b) Home Within Home , North Wall, Leum version 2009 [120].

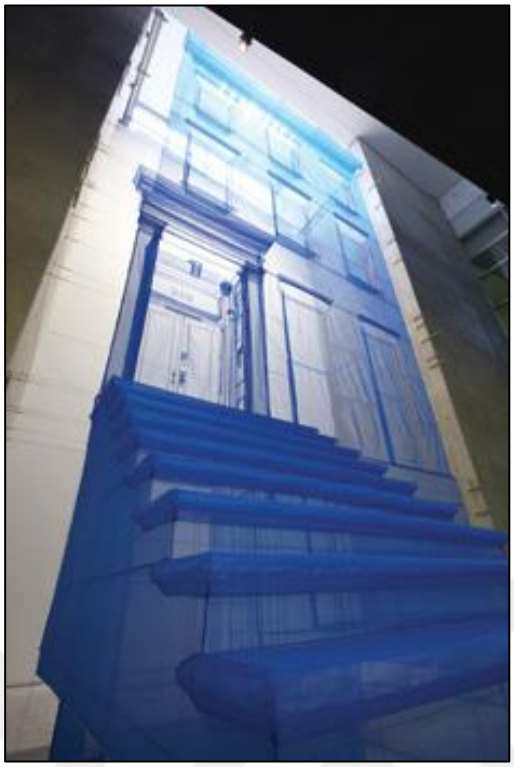


Figure 4.3. Home Within Home, Blueprint, Leum version 2010 [120].

Designed by Do Ho Suh, Home Within Home Within Home Within Home Within Home (HWHWHWHWH) (Figure 4.1.) was exhibited in 2013 at the National Museum of Modern and Contemporary Art (MMCA) in Seoul [121].

The art product, consists of two layers, the house in which Do Ho Suh spent his childhood and the Victorian house in which he lived in the United States, but he is encouraged to explore it in a wider perspective by the designer. This broad perspective represents the presence of artifacts on the outside of the two stratified houses, the museum structure on which the box is located, and the existence of Seoul. For this reason, the art product designed as ‘Home Within Home’ ‘actually refers to five different but intertwined layers as’ Home Within Home Within Home ‘ [117].

## 4.3. READING THE CASE STUDY THROUGH THREE DIFFERENT APPROACHES

The relationship between space and Cartesian Thought, Experience, Death of Reality, which was discovered while questioning the relationship between reality and space, was read through the case study ‘Home Within Home Within Home’ in the following sections.

### 4.3.1. Cartesian Thought and ‘Home Within Home Within Home’

HWHWHWHWH, as a multi-layer artwork, represents 5 different layers of space nested. The two works that constitute the core of the layered design consist of 1: 1 replicas of the two houses where the designer lived at different periods of his life [121]. Do Ho Suh's childhood home is a traditional Korean house, while the second tier outside of this house is a three-storey Victorian apartment in the United States where he went to study (Figure 4.4.) [122].

Figure 4.4. Home Within Home. Photo from the exhibition space [123].

The two houses depicted with Cartesian space and the built environment in which they are located constitute the starting point of the artist's design idea. Do Ho Suh explains this design idea in his own words:

> As you approach the gallery space, my translucent piece is between the viewer and the longer view, so it becomes five homes-within-homes: my two homes inside; the museum; the palace; and then Seoul [117].

The main motivation of the design is Do Ho Suh's relations with himself and his environment. Do Ho Suh, who had the opportunity to live in Seoul, New York and many European countries, focused on the relationship between himself and the outsider and revealed this art product by referring to the stratification of the outsiders but also the intertwining situation [124]. Audience to see this art product respectively; Passing through the urban dynamics of Seoul's (Figure 4.5.), passing the long lobby area after seeing the red tile building at the entrance of the Museum (Figure 4.6.), passing through the open spaces of the exhibition box (Figure 4.7.) [121].

Figure 4.5. MMCA site plan, Seoul. From Google maps.

Figure 4.6. Different views from MMCA building. Seoul [125].


Figure 4.7. Home Within Home, exhibition box, MMCA building, Seoul [121].

The artwork with a height of 12 meters and a width of 15 meters (Figure 4.8.) meets the actual dimensions of the structures to which it is replicated. The art product is made of blue semi-opaque polyester material, which is made from Korea's traditional summer outfit. While the exterior of the modern building can be accessed inside, the traditional Korean structure in the core offers an area to walk around. Thanks to the permeability of the semi-transparent material used in the art product, the houses were made visible inside the exhibition space [122].

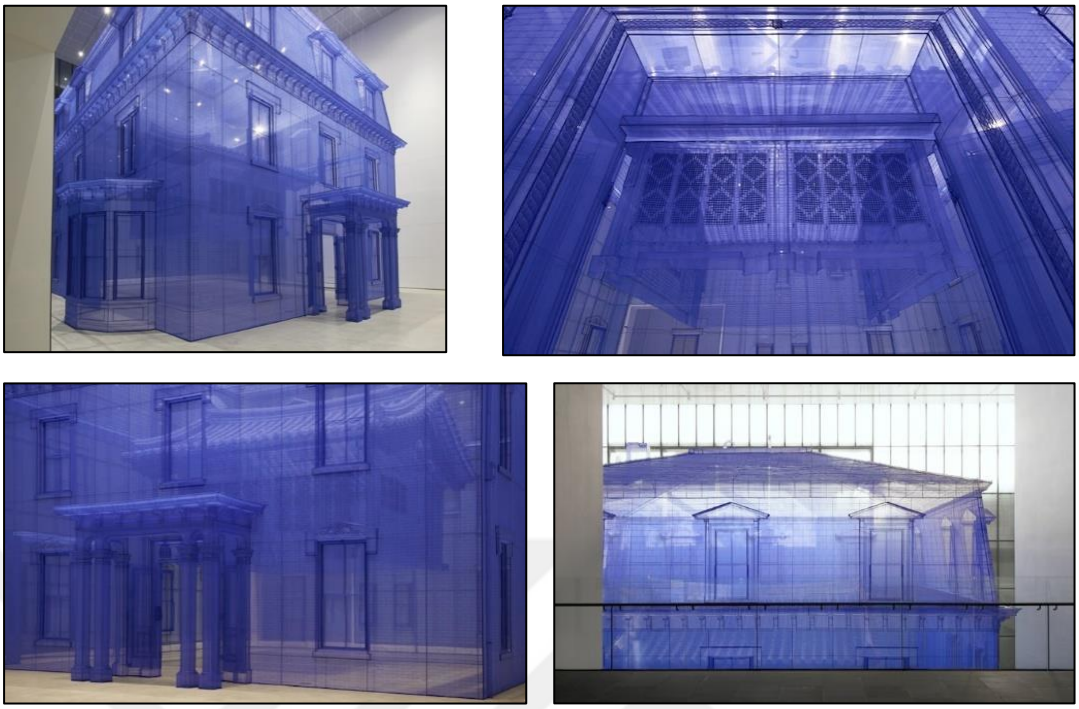


Figure 4.8. Several views from HWHWHWHWH [117].

The surreal space created by the copies of the real two houses, which were made in the relationship of the exhibition with this audience, made by preserving one-to-one dimensions, is stated in the official site of the museum as follows:

> The walls made of flimsy transparent fabric of refreshing color let the inside and the outside views pass through them to cancel the weight of the enormous structure and simultaneously to enhance the sentiments of the visitors with ‘weightleess memories’ of their own ‘spaces’. Enveloped by the inside and the outside between private space and public one, the viewers are fully exposed to the dizzy ambience of the surreal space where the East and the West, the past and the present and the real and the imaginary are intricately interwoven with each other [121].

The information obtained in the case study examined through the Cartesian thinking system reveals a reality established by the concrete data of the space and the discourses of the designer mind. The reality for the exhibition read from this perspective is the HWHWHWHWH art product, a new stratification including the virtual, by creating a relationship between the ‘Home Within Home’ art product consisting of replicas and the real and stratified spaces in which this product is located.

### 4.3.2. Experience and ‘Home Within Home Within Home’

With reference to Heidegger, the experience is transformed into a reality that emerges from the unity of space and subject, not from subject duality. Space constitutes the subject and causes the production of different realities based on experience by establishing the subject space consecutively [84]. Through this idea, the exhibition will create more than one reality rather than one. Even if the space is the same, every subject, every Dasein [60] will emerge as a producer of a different reality. Home Within Home Within Home, which explores the relationship between individuality, anonymity and collectivity, has provided the viewer with the opportunity to think on his own, while allowing the visitor to experience a constantly expanding concept of space while walking around [126]. For this reason, some representative discourses and visuals that are sampled under this section may reflect the representation of this exhibition by users.

- Platform: Open Source Studio.

  Username: Tantay.

  Type: Personal blog.

  Year: 2017.

  Expression:

  /…/ This multi-layered narrative inspires me as we delve deeper into his experience, not just as an artist but also as a human [127].

The user, Tantay, is an installation artist working in the fields of digital technology and human behavior actions. The view that this multilayered work deepens not only an artist but also a human being shows that the work has profound effects and allows different spatial experiences for professional visitors (Figure 4.9.).

- Platform: Designboom website.

  Username: Ronin, Dbkii, Ron Smith.

  Type: Comments.

  Year: 2013.

  Expression:

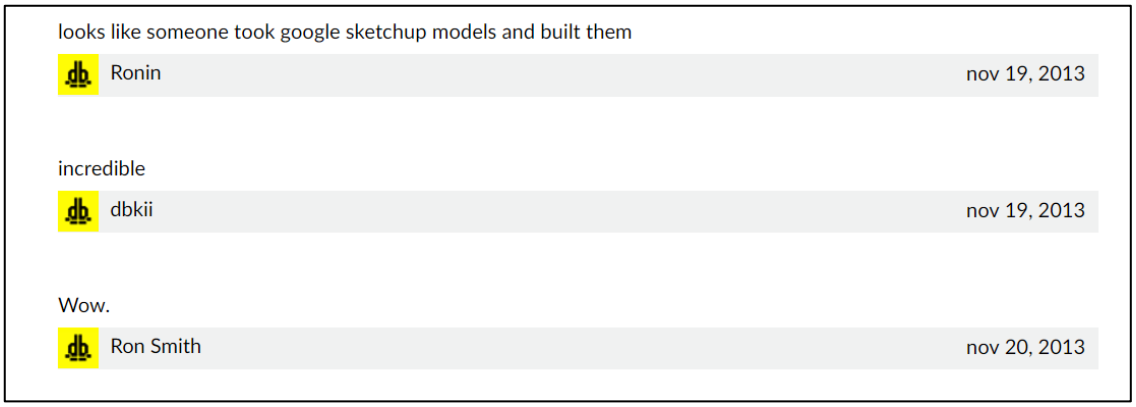



Figure 4.9. Screenshot of comment section of the related article in Designboom [128].

These comments were taken from the personal electronic platform Studentfalio. This platform is a platform established under the Personal Development Planning program established by the University of Brigton. Ronin, one of the university students, commented that the sketchup, a three-dimensional design program frequently used by architects and designers, resembles virtual models. It was thought to have an effect like modeled and placed in the program. Ronin, who is thought to be a commentator who does not personally experience the work of art, found this commentary unbelievable. It is thought that it has the potential to create three-dimensional designs that can be visited and experienced by designers.

- Platform: Brighton Folio.

  Username: Amber Griffin.

  Type: Brighton Student portfolio sharing platform.

  Year: -

  Expression:

  /…/The spaces that Suh creates allow people to move within them and experience his homes, in doing this one is able to notice minute detail and get a much more personal insight into the work. The work of Do Ho Suh gives an idea of how Architecture and Interior Architecture can be portrayed in a very conceptual way, how the materiality of the spaces can portray a concept or an idea, in a subtle yet beautiful way [129].

Amber Grifin's interpretation concentrates on the momentary experience of homes. The work, which he considers important in terms of describing a space conceptually, has the potential to be a model for architects and interior designers(Figure 4.10.).

- Platform: Instagram.

  Username: Various users

  Type: Instagram photo share.

  Year: 2013-2015.

  Expression:

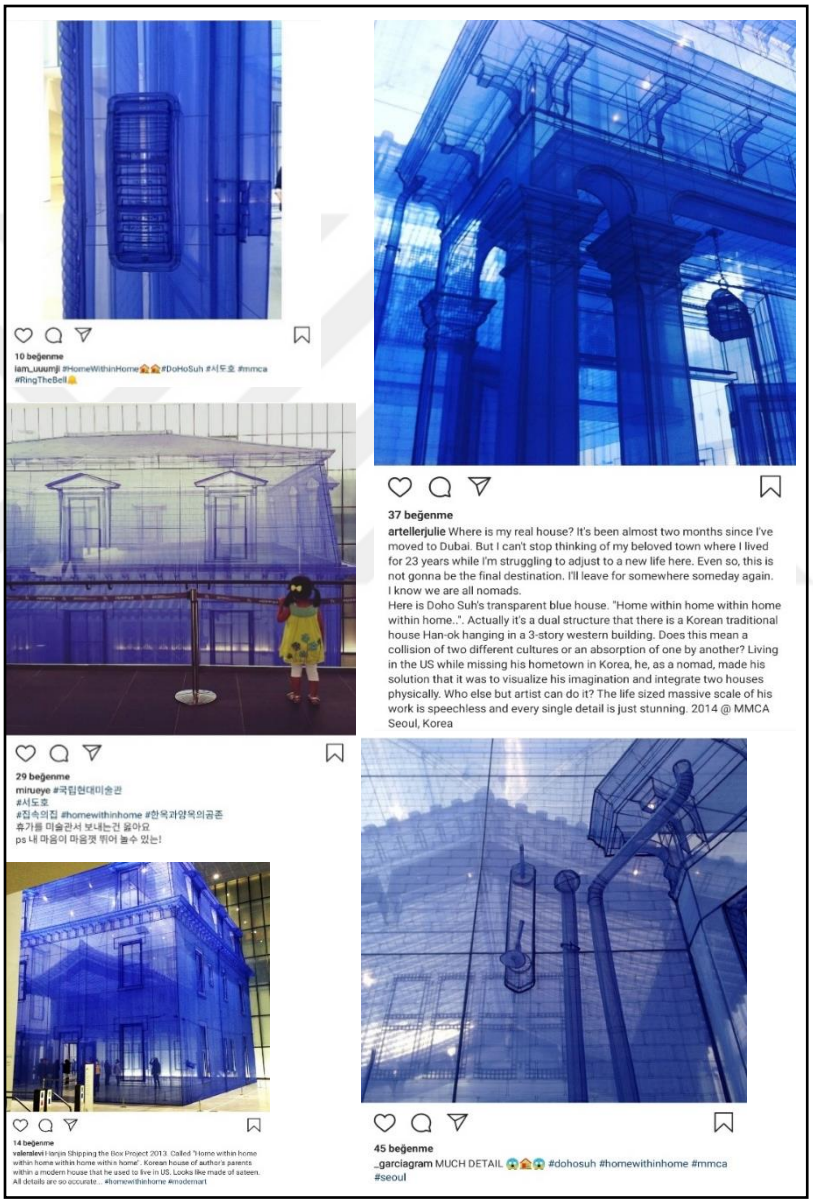



Figure 4.10. Photos posted by various users with #homewithinhome tag [130].

One of Instagram users, Artellerjule's comment is remarkable. The visitor, asking where my real home is, found it important for Do Ho Suh's intertwined transparent blue work to experience different cultures. The user experience shows that the artist has achieved his goal.

Different interpretations have shown that each user creates their own personal experiences based on their own life practices to produce different realities of space. These realities have created different realities ranging from being an inspiration to the work, to creating a cultural experience, to being treated as a means of representation.

### 4.3.3. Death of Reality and 'Home Within Home Within Home'

According to Baudrillard's theory of death, reality in the simulation universe can be reproduced and reproduced in a manner devoid of the hyper-real origin and reality that imitates the reality [95]. HWHWHWHWH is a copy of the two layers that constitute the core of 5 layers of the installation work with 1: 1 scales and details of the spaces they represent(Figure 4.11.). Synthetically produced, these spaces have not lost their ties to reality. 4.3.2. As expressed in section number, the representations of the user in the world of meaning differed in the axis of the new experiences they offered to the user. Although the users knew the fact that the work was imitation, they looked at it with another reality.

Figure 4.11. A photo taken from the angle of the material to place the virtuality of the space [131].

While the study presents new realities to users, they are known to be copies of the houses they represent. Having this information has not changed the new space experiences and the representation of the space offered to people. Evaluations such as the inspiration of the place

by some experiencers, some looking at it as part of the architectural presentation, and some experiencing cultural experiences even though they know it is a home have shown that the two houses represented by the exhibition are not spoken. Although they are copies of the two houses that were the subject of the study, it was found that Do Ho Suh's (HWHWHWHWH) artwork was not visited by visitors with the reflex of visiting and discovering the houses and it was found that the installation was detached from the places where it was a copy in context. In this case, it was found that the artwork presents a different spatial reality for each visitor beyond being a house in the place where the artwork is exhibited. It has been determined that this place where different realities are established can be considered as hyper-real space which has lost its connection with reality.

## 4.4. EVALUATION: POTENTIAL EVOLUTION OF SPACE FROM HYPER-REALITY TO REALITY

In this work where the potential evolution of hyper-reality to reality is questioned, the artwork (HWHWHWHWH) of Do Ho Suh, which is considered as a case study, is examined in three different approaches. The first of these, the Cartesian approach, was carried out on a scale of 1:1 and produced by imitating two nested houses using metal and textile materials. The work of art, which consists of copies of two houses, the main subject of which is evaluated through the connection it has established with the city and the museum it is exhibited in, defines the spatial existence by stratifying and creating a virtual space. The aim of this artwork is to make the visitors experience the city, the museum and the replica of two intertwined houses. In this context, it is found that the visitors construct different realities for themselves with different experiences from each other. However, it was found out that the comments were not focused on the houses. As a result of this, two intertwined houses with a cognitive absence were evaluated as hyper real, although they showed a Cartesian being that constitutes the main subject of the art product as a result of the evaluation made with the hyper-reality approach.

When the potential of hyper-reality to become reality in the third part of the thesis is examined with post-truth approach, two possible approaches are determined. (HWHWHWHWH) exhibition has been examined through these two approaches. The first approach, which is an imitation of the truth, can be considered as the death of reality. With

this approach, the reality of space makes it possible to define it as a new reality that has no relation to itself and replaces it. Hyper-real case area is considered with the first approach and it is determined that the work, which replaces the two houses imitated in the exhibition, can create a post-truth potential reality by determining that the spatial effect created by the work is detached from the context of the houses they are copies of.

Another approach in which the thesis rests itself at the point of discussion is the interpretation of the second type of post-truth concept. Is it possible that the reality produced by the user is a new reality rather than a hyper reality? Could this reality, that pretends to be real, establish a new reality by addressing the user's emotions and habits?

These questions appear to be discussable through the exhibition (HWHWHWHWH). Two houses with two layers in the core of this 5-storey exhibition are imitations of their own reality. This imitation has not completely severed its ties from its reality but it is not same as what it imitates. It would not be wrong to think that as an imitation of another being with its existence, it can transform itself into a new reality with the participation of its user. Although it contradicts Baudrillard's view, which advises us to avoid this by predicting that it will become hyper-reality, the new reality potential view put forward in this case study suggests that a potential positive meaning can be given to hyper-reality.

# 5. CONCLUSION

After the innovations in the field of physics and technology in the second decade of the 21st century, the concepts of reality and virtuality that have been included in the research field of many disciplines have also affected architectural research and the virtual and / or hyper reality of architecture has been questioned. In this thesis, the investigation of the reality of the architectural space considered in the field of existence was considered important and the position of the architectural space in the contemporary understanding of reality was opened to discussion. For this discussion, the historical conceptualization process of space has been examined first. The ontic dimension of spatial conceptualization has been demonstrated from ancient Greece to its use in the contemporary period.

As the second stage, the reality is defined by focusing on the space-reality cross-section and it is discovered that the reality varies in terms of definition by philosophical forms of thought. For this reason, reality concept research is divided into titles within the framework of certain common features and their effects on the reality of space are revealed.

It is conceived as a search for answers to questions "How did the relationship between the reality of space and ontology affect the concept of space in architecture, and who are the main actors of this relationship?" and the main actors are identified as Descartes (cartesian space), Heidegger (experiential space) and Baudrillard (hyper real space) through these two approaches.The three headings, which are expressed as periodic breaks in the intersection of space-reality: space-cartesian thought relationship, space-experience relationship, and the perception of reality coming to the modern era under the loss of space-reality, are presented. While Cartesian thought establishes a reality about the space through the quantitative data and characteristics of the space, it reveals that the space that is conducted through experience is the subject that experiences the fiction of the space and the space establishes common and changing realities on each subject. In the space that is read over the loss of reality, instead of reality, space has been revealed as a hyper reality which has lost its connections with reality.

The case study of the thesis, Do Ho Suh's Home within Home within Home exhibition, which is thought to be able to open up all these ontological understandings of space, is examined. The surreal space that emerged with this exhibition gave the opportunity to discuss all the

ontological space theories which are Descartes (Cartesian space), Heidegger (experiential space) and Baudrillard (hyper real space) of the thesis within the scope of the literature and allowed the discussion of the relation of space with hyper reality on a concrete basis.

In the thesis, with reference to the historical development of the theoretical part of the reality of space, two types of approaches which can be put forward in terms of hyperreality and posttruth are determined. The first approach is related to the fact that post-truth word meaning replaces the truth. In this case, a relation with Baudrillard's theory of the loss of reality is established and it is stated that the imitation of the space completely is disconnected with the reality and establishe a new reality as hyper reality.

The secondary possible approach is located in the positive domain of the meanings imposed on posttruth. This stage contains the condition of treating a phenomenon as real even though it is known that it is not real. As a result of this study, although it is known that the space produced is imitated, it is determined that other meanings are attributed to it. The fact that the motivation of the visitors is based on experience rather than a visit to the place has brought the following statememt; Although this motivation and the fact that space is a direct reflection of the reality, this imitation space, attributed to other realities, has already been cut off from its ties with reality. Does this break carries the potential to create a new reality?

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# APPENDIX A: SPACE IN HISTORY

Table A.1. Space in history. Constituted by author.

| SPACE IN HISTORY | ANCIENT AGES | | | MIDDLE AGES | MODERN PERIOD | | CONTEMPORARY PERIOD | |
|---|---|---|---|---|---|---|---|---|
| | Pythagoras | Plato and Aristotle | Vitruvius | Scholastic Thought | Renaissance and Enlightenment | Modernity | Contemporary World | Simulation Theory |
| 6th century BC | **MATHEMATICAL ORDER<br>As the basis of existence, numbers have spatial magnitude and these numbers form the space of the universe.** | | | | | | | |
| 4th century BC | | **GENESIS AND KHORA<br>Space is a reflection of ideals (genesis) and takes its reality from basic forms with four basic elements (Platonic forms) Space is formed by geometry in the world (Aristotle)** | | **COMBINING ANCIENT ONTOLOGY WITH CHRISTIANITY<br>Celestial space; math and order<br>heavenly space; divine space where ideals exist** | **THE CONNECTION OF ANCIENT ONTOLOGY WITH REASON<br>The ABSOLUTE SPACE created by the human mind and the mathematical integrity of space. Space is only possible with the human mind.** | | | |
| 1st century BC | | | **SYMMETRY<br>The symmetry as the essence of space - the relationship between two measurable quantities to a common measure.** | | | | | |
| 5th - 15th century AD | | | | | | | | |
| 15th-19th century AD | | | | | | **PRODUCTION OF SPATIAL SPACE WITH MIND<br>The intellectual subject who produces space. Classification of space.** | | |
| 19th-20th century AD | | | | | | | | |
| 20th-21st century AD | | | | | | | **SPACE EXPERIENCE AND EVENT<br>The subject-space relationship and the subject creating the space** | **VIRTUALITY OF SPACE AND SIMULATION THEORIES** |
| 21st century AD- | | | | | | | | |

# APPENDIX B: THE REALITY OF SPACE IN HISTORICAL ORDER

Table B.1. The reality of space in historical order. Constituted by author.

| THE REALITY OF SPACE IN HISTORICAL ORDER | ANCIENT AGES | | | MIDDLE AGES | MODERN PERIOD | | CONTEMPORARY PERIOD | |
|---|---|---|---|---|---|---|---|---|
| | Pythagoras | Plato and Aristotle | Vitruvius | Scholastic Thought | Renaissance and Enlightenment | Modernity | Contemporary World | Simulation Theory |
| 6th century BC | **MATHEMATICAL ORDER**<br>**As the basis of existence, numbers have spatial magnitude and these numbers form the space of the universe.** | | THE REALITY OF SPACE<br>ABSTRACT CONCEPTS AND IDEAS<br>mathematics - geometry- symmetry | | | | | |
| 4th century BC | | **GENESIS AND KHORA**<br>**Space is a reflection of ideals (genesis) and takes its reality from basic forms with four basic elements (Platonic forms) Space is formed by geometry in the world (Aristotle)** | | **COMBINING ANCIENT ONTOLOGY WITH CHRISTIANITY**<br>**Celestial space; math and order heavenly space; divine space where ideals exist** | THE REALITY OF SPACE<br>REASON AND INTELLECTUAL SUBJECT<br>absolute space and spatial space<br>**THE CONNECTION OF ANCIENT ONTOLOGY WITH REASON**<br>**The ABSOLUTE SPACE created by the human mind and the mathematical integrity of space. Space is only possible with the human mind.** | | | |
| 1st century BC | | | **SYMMETRY**<br>**The symmetry as the essence of space - the relationship between two measurable quantities to a common measure.** | | | | | |
| 5th - 15th century AD | | | | | | | | |
| 15th-19th century AD | | | | | | **PRODUCTION OF SPATIAL SPACE WITH MIND**<br>**The intellectual subject who produces space. Classification of space.** | | |
| 19th-20th century AD | | | | | | | | |
| 20th-21st century AD | | | | | | | THE REALITY OF SPACE<br>Subject-Based Reality<br>**SPACE EXPERIENCE AND EVENT**<br>**The subject-space relationship and the subject creating the space** | THE REALITY OF SPACE<br>REALITY SEARCH IN VIRTUAL SPACE<br>**VIRTUALITY OF SPACE AND SIMULATION THEORIES**<br>**Loss of reality in space** |
| 21st century AD- | | | | | | | | |

# APPENDIX C: THREE APPROACHES THROUGH THE REALITY OF SPACE

Table C.1. Three approaches through the reality of space. Constituted by author.

| THREE APPROACHES THROUGH THE REALITY OF SPACE | ANCIENT AGES | | | MIDDLE AGES | MODERN PERIOD | | CONTEMPORARY PERIOD | |
|---|---|---|---|---|---|---|---|---|
| | Pythagoras | Plato and Aristotle | Vitruvius | Scholastic Thought | Renaissance and Enlightenment | Modernity | Contemporary World | Simulation Theory |
| 6th century BC | **MATHEMATICAL ORDER** As the basis of existence, numbers have spatial magnitude and these numbers form the space of the universe. | | | | **FIRST BREAKING POINT IN THE REALITY OF SPACE DESCARTES AND CARTESIAN SPACE** the spatial existence is the reality of space | | | |
| 4th century BC | | **GENESIS AND KHORA** Space is a reflection of ideals (genesis) and takes its reality from basic forms with four basic elements (Platonic forms) Space is formed by geometry in the world (Aristotle) | | **COMBINING ANCIENT ONTOLOGY WITH CHRISTIANITY** Celestial space; math and order heavenly space; divine space where ideals exist | **THE CONNECTION OF ANCIENT ONTOLOGY WITH REASON The ABSOLUTE SPACE** Created by the human mind and the mathematical integrity of space. Space is only possible with the human mind. | | | |
| 1st century BC | | | **SYMMETRY** The symmetry as the essence of space - the relationship between two measurable quantities to a common measure. | | | | | |
| 5th - 15th century AD | | | | | | | | |
| 15th-19th century AD | | | | | | **PRODUCTION OF SPATIAL SPACE WITH MIND** The intellectual subject who produces space. Classification of space. | **SECOND BREAKING POINT IN THE REALITY OF SPACE HEIDEGGER AND EXPERIMENTAL SPACE** the experience of space as a being is the reality of space | |
| 19th-20th century AD | | | | | | | | |
| 20th-21st century AD | | | | | | | **SPACE EXPERIENCE AND EVENT** The subject-space relationship and the subject creating the space | **VIRTUALITY OF SPACE AND SIMULATION THEORIES** Loss of reality in space |
| 21st century AD- | | | | | | **THIRD BREAK POINT IN THE REALITY OF SPACE BAUDRILLARD AND THE LOSS OF REALITY** call to return to the Cartesian space against the hyper-reality of the virtual space | | |