

VIRTUAL MUSEUMS: A NEW SPACE FOR ARCHITECTURAL
DOCUMENTATION AND DISPLAY

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DOCUMENTATION AND DISPLAY**

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ABSTRACT

VIRTUAL MUSEUMS: A NEW SPACE FOR ARCHITECTURAL DOCUMENTATION AND DISPLAY

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The practice of museology has a broad discourse based upon ideological, sociological, technological and architectural disciplines. This thesis will only cover two of these disciplines, architecture and technology, while analysing the museum environment as it is believed that museums are one of the most independent architectural spaces in both design and narration. Today, the field of virtual museums becomes very dynamic due to technological innovations and it offers different conceptual ideas for architecture and museography. Museums that are designed using virtual applications function in-between real and virtual spaces. Therefore, this study aims at focusing on virtual museums as a new space for architectural documentation and display.

In this context, an unusual museum project at “METU Lodgings”, House No. 05 will be used as a tool and subject that illustrates the relation between museum architecture and contemporary technology. House No. 05 was designed as a temporary museum, however it suggests a permanency. This thesis can highlight the influence of a virtual website a museum although it no longer exists.

Keywords: Virtual Museums, Museum Architecture, Technology, Virtual/Real Space, Architectural Documentation, Display, “METU Lodgings”.

ÖZ

SANAL MÜZELER: MİMARİ DOKÜMANTASYON VE SERGİLEME İÇİN YENİ BİR MEKAN

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Yüksek Lisans, Mimarlık Bölümü
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Müze bilimi pratiği, ideolojik, sosyolojik, teknolojik ve mimari disiplinleri temel alan geniş bir söylem içermektedir. Müzelerin tasarım ve anlatımda en bağımsız mimari mekanlardan biri olduğuna inanılan bu tez, müze ortamını analiz ederken bu disiplinlerden yalnızca mimari ve teknolojiyi kapsamaktadır. Günümüzde, sanal müzeler teknolojik yenilikler sayesinde dinamikleşmekte ve mimarlık ve müzecilik için farklı kavramsal fikirler sunmaktadır. Sanal uygulamalar kullanılarak tasarlanan müzeler, gerçek ve sanal mekan arasında işlev görmektedir. Bu nedenle, bu çalışma sanal müzeleri mimari dokümantasyon ve temsil için yeni bir mekan olarak ele almayı amaçlamaktadır.

Bu bağlamda, sıra dışı bir müze projesi, “ODTÜ Lojmanları” 05 No’lu konut, müze mimarisi ile çağdaş teknoloji arasındaki ilişkiyi gösteren bir araç ve konu olarak kullanılacaktır. Böylelikle geçici bir müze olarak tasarlanan 05 No’lu konut kalıcılık kazanacaktır. Bu tez, sanal bir web sitesinin artık mevcut olmayan bir müze üzerindeki etkisini vurgulamaktadır.

Anahtar Kelimeler: Sanal Müzeler, Müze Mimarlığı, Teknoloji, Sanal/Gerçek Mekan, Mimari Dokümantasyon, Sergileme, “ODTÜ Lojmanları”.

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CHAPTER 1

INTRODUCTION

“Virtual reality is a new medium brought about by technological advances in which much experimentation is now taking place to find practical applications and more effective ways to communicate.”¹

This definition of “virtual reality” emphasizes new discoveries and possibilities regarding technology and communication. The purpose of this study is to introduce alternative spatial organization options for museums. It is believed that “virtual reality”, a popular term after the creation of the Internet, can enhance the “conventional museum space” through multiple aspects. The term “virtual reality” is a blend of one’s imagination and reality or in other words fiction and truth. It is neither purely artificial nor one-hundred percent real. That’s why it can create a two-fold architectural space: the one fold is envisioned illusion, while the other based on concrete reality. As Peter Eisenman, in an early essay, states:

“The in-between in architectural space is not a literal perceptual or audible sensation, but an affective somatic response that is felt by the body in space. This feeling is not one arising from fact, but rather from the virtual possibility of architectural space.”²

This quote accurately reflects the nature of this study focusing on the juxtaposed and the in-between condition of virtual reality in relation to virtual museums; as “virtual museums” are the best vehicles to analyse the architectural dimension of virtual reality because of their fluid design. Virtual museums have a place in architectural discussion because of this “fluidity”.

¹ William R. Sherman, Alan B. Craig, Understanding Virtual Reality: Interface, Application and Design, (San Francisco: Morgan Kaufmann Publishers, 2003), p. 5.

² Peter Eisenman was quoted in Elizabeth Grosz, Architecture from the Outside: Essays on Virtual and Real Space, (Cambridge: The MIT Press, 2001), p. XIV.

“The term ‘virtual museums’ has been defined as ‘...a logically related collection of digital objects composed in a variety of media which, because of its capacity to provide connectedness and various points of access, lends itself to transcending traditional methods of communicating and interacting with visitors...; it has no real place or space, its objects and the related information can be disseminated all over the world.”³

According to Schweibenz, the organization of virtual museums depends on many factors, such as media and digital resources. The chief aspect that separates virtual museums from other brick and mortar museums is their ultimate accessibility. This study emphasizes that with a single mouse click, the collection and information available in a virtual museum becomes accessible from all around the world. Although there is a significant difference between “Museum without Walls”, by Andre Malraux, and today’s virtual museums on the Web, they have similar conceptual purpose regarding accessibility. Malraux’s aim in creating his “Museum without Walls” was to preserve the original character of a piece of art, even if it is a sculpture or a drawing. Malraux demonstrates that formal museums diminish the aura of works of art when bundled together, transforming masterpiece drawings into simple photographs.⁴ He introduced the idea of “Museum without Walls” as an imaginary museum that has a collection of works of art from around that world that can be brought together through photography.⁵ According to Malraux:

“An art book is a museum without walls.”⁶

Thus, he created his own museum that consisted of a wider collection of art works available in one “space”. It can be said that virtual museums are technological reflection of Malraux’s efforts. They are similar as they both can include a number of concepts and are mobile and accessible from almost anywhere. Furthermore, they protect their autonomous limits as being welcoming to any information at any time.

³ Werner Schweibenz, “The Development of Virtual Museums”, *ICOM News*, vol. 57, no.3, (Paris; ICOM, 2004), p. 3. See also, http://icom.museum/fileadmin/user_upload/pdf/ICOM_News/2004-3/ENG/p3_2004-3.pdf

⁴ Andre Malraux, *The Voices of Silence*, translated by Stuart Gilbert, (New Jersey: Princeton University Press, 1978), p. 14.

⁵ <https://culturalvirtualspaces.wordpress.com/2014/06/17/malraux-and-the-musee-imaginaire-the-museum-without-walls/>

⁶ <http://www.goodreads.com/quotes/817690-an-art-book-is-a-museum-without-walls>

In virtual museums, visitors experience a different understanding of time and a transformation in space, where they gain “fluidity”⁷ compared to physical museums or other similar spaces. Here, the term fluidity was chosen to emphasize the continuity and endless characteristics of time, feelings experienced and changes.



Figure 1.1: Andre Malraux, “Museum without Walls”, 1947.

Source: <https://neatlyart.wordpress.com/2013/05/30/andre-malraux-chef-lui-maurice-jarnoux-over-the-last/>

In this thesis, Modern Architecture is the stylistic movement selected to configure the spatial organization of virtual museums, based on the belief that virtual museums were born out of Modern Architecture but also limited by its principles. One of the most pervasive styles for displays, exhibiting on a “white surface”, originated with modernity; in regenerating virtual museums this concept will be applied using “white cubes” and “white walls”. As Ayşen Savaş states:

⁷ The term “fluidity” was firstly used by Marcos Novak, an architect employs algorithmic techniques to design actual, virtual and hybrid intelligent environments. It mainly comes from the concept of “liquid architecture” and “transarchitecture” to address spaces that are conceived specifically for a virtual domain, one that does not exist in a physical world. For detailed information please see, Silvia Camile, “Liquid Architectures: Marcos Novak’s Territory of Information”, Master Thesis, University of Brasilia, 2005.

“Museums have been considered as the material and intellectual outcomes of modernist thoughts.”⁸

Based on this statement, this study asks: which modernity principles have impacted the creation of virtual museums; what are the spatial differences between modern museums and virtual museums; and how the character of museum space transformed from Modern Architecture to computer architecture (in other words, from “white cubes” to “cyberspace”).

“The idea of accumulating everything, of establishing a sort of general archive, the will to enclose in one place all times, all epochs, all forms, all tastes, the idea of constituting a place of all times that is itself outside of time and inaccessible to its ravages, the project of organizing in this a sort of perpetual and indefinite accumulation of time in an immobile place, this whole idea belongs to our modernity.”⁹

Based on this Michel Foucault’s quote on museums, defined as “places of heterotopia”, Modernity locates the concept of a museum in a dynamic sphere, where all artistic wonders are gathered in a room to expand within a spacious structure. This is where architecture and museology come together and generate the anatomy of exhibition and the environment of museums. He categorizes museums as “heterotopias” because he believes that they are the places standing in past and present while embracing both. He defines the “complex” or “heterogeneous structure” of museums in the nineteenth century’s western modern culture, based on categorization and classification. Modernity has a “taxonomic mind” and the “modern” eye recognizes hierarchies of genre and the authority of the frame.¹⁰ This understanding of Modernity can be adopted today’s virtual museums in order to offer categorized and classified exhibits to website visitors. In other words, museums on the World Wide Web should be designed according to the taxonomy of information that provides “fresh insights” for mess virtual archives.

⁸ Ayşen Savaş, “Reconstructing the White Wall”, *METU fine arts exhibition catalogue*, July 2007, p. 20.

⁹ Michel Foucault was quoted in Tony Bennett, *The Birth of the Museum: History, Theory, Politics*, (London: Routledge, 1995), p. 1.

¹⁰ Brian O’Doherty, *Inside the White Cube: The Ideology of the Gallery Space*, (Los Angeles: University of California Press, 1999), p. 16.

As previously mentioned, when discussing the subject of Modern Architecture and museums, “white surfaces” play a big role in exhibition displays. White surfaces offer an unobtrusive presence that allows the museum’s collection to stand out.

“It is true that white wall has been conceived as the manifestation of abstraction, particularly in Modern Architecture. And it is true that it was the symbol of a new life style and interpreted as a bare ground, a *tabula rasa*, for a better future.”¹¹

Here, this abstract concept of “white walls” can be connected to virtual museums. As on Web-based museums, there are abstract spaces organized by virtual layers. Architecturally, virtual museums thought to have no strict boundaries or limited spatial lines. Informational and visual archives of virtual museums are arranged according to a “virtual matrix”¹², which is considered as the blueprint to virtual design.

This study examines the understanding of a virtual display in terms of “memory”, “narration” and “space”. Here, “memory” is defined as the collective mind or individual archive; “narration” relates to the language of museums; and “space” relates to cyberspace. To solidify these concepts, the museum at “METU Lodgings” (House No. 05) will be examined.¹³ The house was designed by Behruz and Altuğ Çinici in 1961 and contains many memories for those that have lived there. Creating a virtual version of this house, a virtual museum, brings those memories back to life. House No. 05 was designed to be a temporary museum, thus, in becoming a virtual museum it has more permanence. Even if it does not remain as a museum in the real world, by virtual representation and virtual space, it will have a continual and mobile presence on the World Wide Web. In one way, the bricks and mortar museum allows the visitors to experience Modern Architecture. However, its virtual version has technological and abstract characteristics. House No. 05 highlights the differences and similarities between its virtual and real versions that can be examined in detail as they simultaneously exist. Moreover, this thesis sees virtual display as one of the consequences of “new media art” and,

¹¹ Ayşen Savaş, “Reconstructing the White Wall”, op. cit.

¹² “Virtual matrix” as defined by Prof. Dr. Ayşen Savaş in ARCH 835, 2015. It is an innovative phrase that enlightens integrated concepts and technological uses in cyberspace.

¹³ This house museum was designed by Prof. Dr. Ayşen Savaş and students of ARCH 723.

“New media art has inspired dreams about our technological future, among them the dream of reconfiguring museums and art institutions. New media art seems to call for a ‘ubiquitous museum’ or ‘museum without walls’, a parallel, distributed, living information space that is open to artistic interference – a space for exchange, collaborative creation, and presentation that is transparent and flexible.”¹⁴

With this in mind, the virtual exhibition of House No. 05 will provide an innovative, flexible, interactive, and imaginary space. Furthermore, with this “virtual space”, this thesis aims to reinvent the understanding of documentation and display in museology. To conclude, this study is twofold: one is to analyse architecture in the virtual world and how it can be applied to the physical museum space organization; the other is re-systematizing the method of documentation and display on a web exhibition.



Figure 1.2: “METU Lodgings”, House No. 05, designed by architects Behruz and Altuğ Çinici in 1961 and transformed into a museum for one day/one hour, by ARCH 723 in 2016.

Photo taken by the author.

¹⁴ Christiane Paul, Challenges for a Ubiquitous Museum: From the White Cube to the Black Box and Beyond, (London: University of California Press, 2008), p. 53.

CHAPTER 2

THE EXHIBITION OF “METU LODGINGS”: HOUSE NO. 05

During the spring semester of 2016 at Middle East Technical University, graduate students, under the direction of Prof. Dr. Ayşen Savaş and Agnes van der Meij, organized an exhibition that was housed in House No. 05 at “METU Lodgings”. The exhibition was a product of seminal courses as part of the Faculty of Architecture. ARCH 723 was a continuation of ARCH 524, which was a project that was developed in 1995 and finalized in 2012. The studio course ARCH 723 was conducted on architectural representation and the object was a house. The idea was “exhibiting a house within a house”¹⁵.

“The method applied in this exhibition is directly related with the production of a real architectural space. That is to say, it is not only a display of architectural objects, but also a space created at different scales that could be visually and physically experienced. ‘Architecture of the exhibition’ matters as much as the ‘architecture in the exhibition’.”¹⁶

In this case, it can be said that the house has its own architectural and conceptual manifestation.

One of the goals of this exhibition is to raise awareness for the need to protect “METU Lodgings”. Due to changes to the immediate surroundings such as: high-density housing construction; new roads built alongside the METU campus; the shape of Ankara; and the circumstances surrounding METU have been threatened. Therefore, the preservation of these houses was seen as important due to their architectural value:

¹⁵ Ayşen Savaş, <http://metudocumented.tumblr.com/tagged/exhibition-documented>

¹⁶ Ayşen Savaş, *ibid.*

“The ultimate goal of this exhibition is to protect these houses, for which a new method of preservation is proposed in which a consciousness is generated of their architectural and social values. ‘Preservation by raising public and institutional awareness’ is the dictum of this long-term commitment.”¹⁷

The exhibition was opened on the 23rd of July 2016, under the title of “METU Lodging Documented”. It was planned to last a day and an hour. Therefore, the house was transformed into a “museum” 25 hours. Although this makes the exhibition temporary, an established archive and documentation allows the exhibition gain permanence. During the exhibition, elevations, sections and details of the house were emphasized with the use of a special material, plexiglass. These drawings were represented on sheets of lit plexiglass. This transparent material can be seen as a conceptual reference that invokes to the main idea of “preservation”. Without any warping of the house, from exterior to interior, every large and small scaled drawings were attached to their relevant area.¹⁸ It helped to illustrate the architectural importance of the house in addition to the aim of “preservation”, as the displays reveal the architect Çinici’s architectural details of the houses were fully realized.

To conclude, the concept of “preservation” offers the house displays itself. Answers as to why it is important to “preserve” House No. 05 can be found in the symbolic meaning of “METU Lodgings”. It is one of the most influential Modern house projects in Turkey, therefore “displaying itself” means revealing the influences of Modern Architecture on both the Middle East Technical University and in Ankara. That is why, restudying Modern Architecture becomes essential also for carrying this project to the virtual space.

¹⁷ Ayşen Savaş, Agnes van der Meij, METU Lodging: Diamonds in Sahara, an unpublished book, (2016), p. 7.

¹⁸ The idea was firstly suggested by Sonat Özcivanoğlu, one of the students of ARCH 723 during the brain storming about the exhibition.



A



B

Figure 2.1: A. House No. 05, elevation of balcony,
photographed by the author.

B. House No. 05, section of stairs on lightened plexiglass,
photographed by the author.

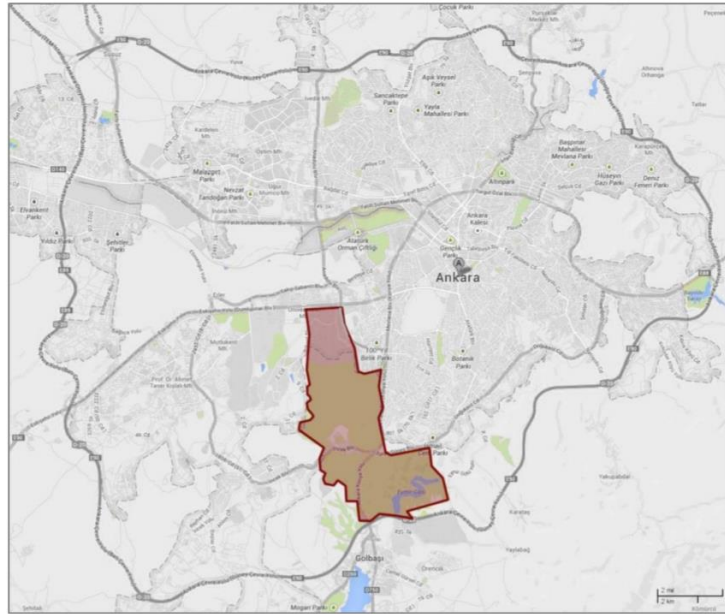


Figure 2.1.1: Location of Middle East Technical University.

Source: Sila Akman, Master Thesis, METU, 2016.

The nineteenth century failed to create a style of architecture due to its inability to achieve a universal discipline of structure and of design.¹⁹ Through International Style, which was developed by Henry Russell Hitchcock and Philip Johnson, the understanding of design principles and stylistic choices in architecture were transformed. The three reasons are as follows: architect's responsibility to society; the rationalist or structural approach to architecture; and academic instruction influenced the birth of this new architecture.²⁰ This new architecture was called as Modern Architecture and became the widest and comprehensive standard for architecture. There have been many criticisms and discussions about the creation, aims and results of Modern Architecture. Although the age of Modern Architecture was considered over, theoretically, it is still one of the most debated subjects in architecture.

The METU campus, which was founded in 1962, is located four miles away from the city center of Ankara and was established in a rural area to the southwest and covers

¹⁹ Henry Russell Hitchcock, Philip Johnson, *The International Style*, (New York, W.W. Norton & Company, 1997), p. 34.

²⁰ Erwin Panofsky, *Idea: A Concept in Art Theory*, (New York: Harper & Row, 1974), p. 40., and also Reyner Banham, first chapter of *Theory and Design in the First Machine Age*, (Cambridge: The MIT Press, 1960).

approximately 111.000 acres.²¹ This huge site and project was designed by Altuğ and Behruz Çinici as part of a national architecture competition for METU. According to the jury report of competition, the project was selected because three major parts of the campus (the academic center, student's dormitories and staff apartments) were compatible with the topography of the site and efficient use of the space.²² When construction was completed, the advanced complex was one of the most unique architectural products in Turkey. From the architectural style, to the concept along with standards that were parallel to the European countries, the project displayed distinctive planning and the most original design with Modern Architecture in Ankara. In other words, Çinici created “a city within a city” that was fully functional and self-sufficient. As they reported:

“Site will correlate between nature, people and cultures ideally. The city, that's METU Campus, which includes well-constructed economic, social, moral and cultural backgrounds will represent an alternative lifestyle and express a philosophy of life.”²³

Aside from offering a new kind of lifestyle, architecturally it was expressed a Modern style. Every building in the campus, from educational to residential, exhibits a purely functional design. METU campus offers free architectural perspective in the capital of Turkey. According to Ayşen Savaş:

“The campus featured a collection of buildings that represent the era of Turkish, not very widely known, “white functionalism”. This building complex reflects, in subtle details, the internationality of its program and the regional interpretation of Modernity in Turkish architectural culture. Learning from the original sources of the MoMA building, such as the principles of Bauhaus and the pioneers of Modern Architecture, Le Corbusier, J.J. Oud, Mies Van Der Rohe, and Walter Gropius, the architects of the campus used every element of Modern Architecture epitomized in exposed concrete surfaces,

²¹ Bilge Köse, “Middle East Technical University: A Modern Cultural Landscape and the Building of a Highway”, 2014, from http://www.docomomo-us.org/news/middle_east_technical_university_a_modern_cultural_landscape_and_building_a_highway

²² Sila Akman, “Conserving and Managing Modern Campus Heritage: ‘Alley’ as the Spine of METU Campus, Ankara”, Master Thesis, (METU, 2016), p. 29.

²³ Altuğ and Behruz Çinici was quoted in *ibid.*, p. 31.

large glass openings, strip windows, flat roofs, and undecorated white walls. The architecture of the METU Campus was understood as 'volume'; which was 'a space enclosed by thin planes or surfaces, as opposed to the suggestion of mass and solidity."²⁴

With this quotation in mind, METU campus can be seen as not only Modern Turkish project, but also universal.

The universal architectural language of METU campus shows itself also in the arrangement of spaces in it. Every zone from residential to educational, is well-structured and purely designed. What is interesting in the campus is, although facilities with different functions seem to separate from each other, there is a unique network between them. Both with pedestrian alley and roads, this network is provided successfully. Therefore, it can be said that the METU campus has a Master Plan with a complex infrastructure which maintains "healthy, ordered and functional" lifestyle.²⁵ Furthermore,

"Needless to say, Ankara was regarded as the *tabula rasa* of the Turkish Revolution, while the same can be said of METU in respect to modern pedagogy, being envisioned as 'ground zero' not only for a new model of higher education and research, but also as an model environment of a university campus in post-war Turkey."²⁶

In the light of these, the campus of Middle East Technical University has an important role for designing the virtual museum of House No. 05. If web museums are seen as virtual version of white walls in Modern display, then METU campus can be used as an influential fact for the web museum of "METU Lodgings".

²⁴ Ayşen Savaş, "Reconstructing the White Wall", op. cit., p. 21.

²⁵ For more information please see, Güven Arif Sargin, Ayşen Savaş, "A University is a society: an environmental history of the METU campus", *The Journal of Architecture*, vol. 18., no. 1., 2013.

²⁶ Ibid., p. 84.

2.2. Housing and “METU Lodgings”

House projects and housing plans have been one of the main subjects to define and analyze new architectural styles such as Villa Savoye reflects Modern Architecture or Casa Batlló representative of Art Nouveau. However, “METU Lodgings” has more symbolic and prominent meaning in its function, “living”. Although “METU Lodgings” does not wholly fall in line with Le Corbusier’s quote, “a house is a machine for living in”, it can be considered an exceptional housing project for Turkey. Before discussing how “METU Lodgings” does not fit Le Corbusier’s description of a house, the significance that was given to housing and living by employing Modern Architecture techniques will be discussed.

In Europe, Modern house planning was established during the 1920’s and the architects of the Bauhaus, the Werkbund and the CIAM, at an international level, illustrated how was it possible to design houses that responded to needed reforms.²⁷ Houses and furniture have always been the first subject in design for defining a new style; such as Gerrit Rietveld’s “red and blue chair”. Similarly, dwelling projects were used to emphasize the end of an era; such as the symbolic end of Modern Architecture with demolition of the “American house project” and “Pruitt-Igoe”.²⁸ As Martin Heidegger, a German philosopher and thinker, claims; “dwelling” refers to “being”. Meaning it meets one of humans’ basic needs for life of habitation/shelter. In his 1951 lecture on building titled “Building, Dwelling, Thinking”, he says *buan*, which means “to dwell”, also can be defined as “I am”.²⁹ Additionally, Heidegger points out that “dwelling” is a three-fold principle: first, it is a way of being that has a cautious and guarded approach; secondly, it should allow things to exist in their essence; and thirdly, it has to be preserve dweller’s relationship with *Das Geviert*: the four-dimensional concept of heaven and earth, divinities and mortals.³⁰

“Heaven stands for the cosmos, the course of the seasons, the cycle of day and night; the earth is there to serve and to support, as life-giver; the divinities are the beckoning messengers of the godhead; and the

²⁷ Roderick J. Lawrence, Housing, Dwellings and Homes: Design Theory, Research and Practice, (Chichester: John Wiley & Sons, 1987), p. 128.

²⁸ For detailed information about Pruitt-Igoe please see, Katharine G. Bristol, “The Pruitt-Igoe Myth”, available at <http://www.pruitt-igoe.com/temp/1991-bristol-pruitt-igoemyth.pdf>

²⁹ Martin Heidegger was quoted in Hilde Heynen, Architecture and Modernity, (Cambridge: The MIT Press, 1999), p. 15.

³⁰ Ibid.

people are called mortals because they can die, because they are capable of death as death.”³¹

Bearing this in mind, “dwelling” can be seen as the precious conduit for “being” and creating a vital world where daily life takes place. Although Heidegger’s “dwelling” can be applied to many architectural creations such as educational and cultural buildings; this thesis focusses on the residential part of architecture because it is believed that houses are the most individualistic and meaningful places of living. In addition, a house is the first and the only architectural project that gains deeper meaning by defining it as “home”, based upon the experiences and memory of the dwellers. As Şebnem Yalınay Çinici mentions, the word ‘home’ means more than what is understood at first glance, and has a deeper meaning than the word house, although both have the same literal meaning.³² It is one’s most intimate space and private place where one feels most secure, relaxed, comfortable, content and at one with one’s surroundings, and also “where one believes one belongs. It is a word that reflects one’s self-being in ontological debates, and self-being is what one strives to be at one with, and what one wants to fully grasp for self-recognition and self-realization.”³³

³¹ Ibid.

³² Şebnem Yalınay Çinici, “House vs Home: An Ontological Challenge”, Ayşen Savaş and Agnes van der Meij, METU Lodging: Diamonds in Sahara, op. cit., p. 32.

³³ Ibid.



Figure 2.2.1: “METU Campus, Perfect Grid” and “METU Lodgings”

Source: “Diamonds in Sahara, METU Lodgings Documented”, unpublished book by Ayşen Savaş and Agnes van der Meij.

“METU Lodgings” were designed for academics the “dwell” in at Middle East Technical University. It is located on the southeast side of the campus closer to the A4 gate than A1, termed as a “residential zone”, also because of dormitories are located in the same area. The area that contains “METU Lodgings” is separate from the other academic areas of the campus so that it provides a non-monitored private life within a huge social environment. Because of the distance between the “METU Lodgings” and other facilities on campus, the site of it offers a silent and comfortable place. It is protected and cannot be seen from the main roads of the METU campus. This free-range location is interesting for the “privacy” concept of Modern Architecture. It is known that Modernity coincides with the publicity of the private.³⁴

³⁴ Beatriz Colomina, *Privacy and Publicity: Modern Architecture as Mass Media*, (Cambridge: The MIT Press, 2000), p. 9.

The location of the “METU Lodgings” is an example of a being private area in a public space. As Nietzsche points out:

“The most characteristic quality of modern man the remarkable antithesis between an interior which fails to correspond to any exterior and an exterior which fails to correspond to any interior- an antithesis unknown to the people of earlier times...”³⁵

However, “METU Lodgings” can be considered as a unique as the inside and exterior correspond to each other. In other words, the dwellers of “METU Lodgings” can engage in the social aspects of campus life whenever they choose, but also have a distinct private space of their own. This is what reflects Modern life understanding in METU Lodgings. If the Middle East Technical University is in its own world in Ankara, then the “METU Lodgings” has a unique habitation space.

³⁵ Nietzsche as quoted in Beatriz Colomina, Ibid.

CHAPTER 3

EXHIBITING MEMORY AS AN INDIVIDUAL ARCHIVE

"I do have abilities. I call it...memory. The ability to relive what has happened a long time ago, but only in your mind. It is much more complicated than that, but it is not something you can understand without experiencing it."³⁶

Relive, mind, and experience are the key words from this quote by Mnemosyne, a Greek Titaness of memory and the mother of the Muses. With the help of these connected terms, this chapter aims to analyse the memory process with respect to architecture and the virtual world. Moreover, this chapter is a review of memory in terms of: how can it be generated for architectural knowledge; how it is shaped as individual archives; what are the spatial influences that can change its nature; what are the differences between historical and virtual memory; and with what techniques can it be emphasized in virtual museums? In order to answer these questions, there will be comparisons between the understanding of memory in historical, modern and new age era.

Since the invention of writing, memory has found itself in many sources as letters, agendas and diaries for remembering each moment it experiences. "*Verba volant, scripta manent*" means "spoken words fly away, written words remain", visual encoding became as powerful as writing. Especially now in our highly technological world, photographs, videos and other visual documentations gain more importance as they document moments, in other words "individual archives". Thomas Richard is quoted as saying:

³⁶ Mnemosyne was quoted in the project of Joan Mao called "Mnemosyne", p. 4. Available at <http://ocw.mit.edu/courses/music-and-theater-arts/21m-604-playwriting-i-spring-2005/projects/mnemosyne.pdf>

“Archive is a utopian space of comprehensive knowledge... not a building, nor even a collection of texts, but the collectively imagined junction of all that was known or knowable.”³⁷

This quote supports the notion of how memorial archive is generated. It is based on imagination and experience. Therefore, it can be defined as a widespread library that can be rendered by both textual and visualized documentation. These textual and visualized sources are a testimonial archive, which is subjective because every moment is documented and stored uniquely by each individual, which can also be called an “individual archive”.

Moreover, “individual archive” is a connotative phenomenon for collected information so it also refers to “collective memory”³⁸. This study emphasizes the importance of “collective memory” in spatial sense because it is believed that architectural surrounding is the most influential notion on creating memory. To specialize the subject, museum memory is preferred for its dual characteristic. First thing that refers memory in museum is exhibited objects. They are the things that are taken from past but displayed with present’s conditions such as with developed technology. Thus, there is a contradiction between the displayed objects and the way of exhibiting them. Second matter of why museums are important spaces for creating memory relies on the museum building itself. Every museum building has its own institutional history and architectural background. Therefore, there is an archival relation between the exhibition and the museum building, which points out different memory.

On the subject of amassing an archive, variations between the method of collecting information in virtual and real environment is distinct. In brick and mortar museums, there is an ongoing process of classification and display archive. Up until a century ago, or at most two centuries ago, collections were primarily private collections and public museums did not exist in any contemporary sense.³⁹ This can be interpreted to

³⁷ Thomas Richard, *The Imperial Archive: Knowledge and the Fantasy of Empire*, (London: Routledge, 1993), p. 73.

³⁸ The term “collective memory” was detailed by Christine Boyer as a unique mental ordering in computer imaginary matrix. For detailed information please see, M. Christine Boyer, “The Imaginary Real World of CyberCities”, *Assemblage*, no. 18., (August, 1992), p. 114-127.

³⁹ Duncan F. Cameron, “The Museum, a Temple or the Forum”, *Reinventing the Museum: The Evolving Conversation on the Paradigm Shift*, edited by Gail Anderson, (United Kingdom: AltaMira Press, 2012), p. 52.

mean that there was not a significant amount of displaying and/or sharing objects, developments, reproductions and new ideas in the field of the arts. This absence of representation was filled with the prototypes of museum as *Kunstkammer* and *Wunderkammer*. Although these two German concepts are brought together under the same roof called a museum, analyzing them separately will create an understanding of the roots of displaying history. *Kunstkammer* comes from *kunst* and *kammer* which mean, as it was written in the Oxford Dictionary, art and chamber.⁴⁰ Thus, it can be understood that one of the roots of museums comes from the word “art chamber” or “art room”, in which art objects were privately collected. The word *Wunderkammer* was translated to English as “curiosity cabinet”, which can be interpreted similarly to “art chamber”. Briefly, it can be surmised that this is a primitive form of museums, the archive is fashioned in two ways: curiosity and art, which one is a “human quality”, while the other is a “human product” a physical output. Therefore, both *Kunstkammer* and *Wunderkammer* demonstrate the strong relationship between art, curiosity, and architectural knowledge in a conceptual and imaginative space. Above all, it is believed that the *Kunstkammer* and *Wunderkammer* collections were personal and unique. They support the earliest attempts of creating collections as an “individual archive”.

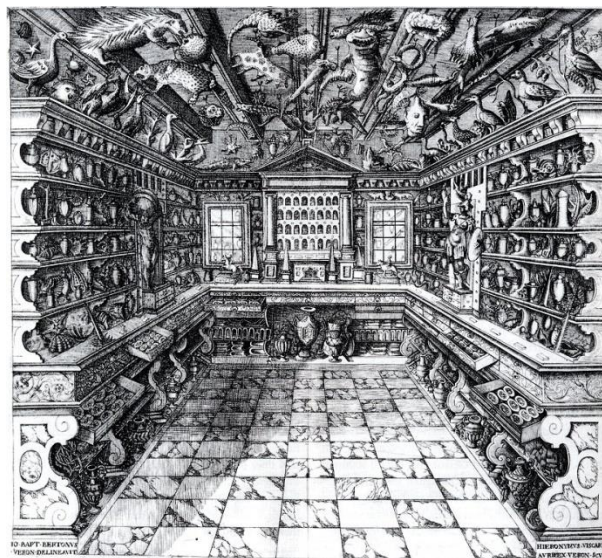


Figure 3.1: A view of a curiosity cabinet.

Source: <http://www.artofwondering.com/2016/09/16/kunstkammerwunderkammer-cabinet-of-curiosities/>

⁴⁰ Oxford Dictionary, <http://www.oxforddictionaries.com/>

3.1. Giulio Camillo and “Theatre of Memory”

In the mid sixteenth century, Giulio Camillo showed exactly what collective memory is and how can it be categorized. In his manuscript the “Theatre of Memory” or “*L’Idea del Teatro*”, he revealed a coherent system of cultural knowledge, taxonomy of early modern alchemical references and beliefs, complete with scrolls and visual signs.⁴¹ His “reformist” analysis on memory is based on his personal knowledge and what he accumulated during his lifetime, in other words, his “individual archive”. As stated by Peter Matussek, a professor of media culture in Siegen University:

“The structure was a wooden building, probably as large as a single room, constructed like a Vitruvian amphitheater. The visitor stood on the stage and gazed into the auditorium, whose tiered, semicircular construction was particularly suitable for housing the memories in a clearly laid-out fashion - seven sections, each with seven arches spanning seven rising tiers. The seven sections were divided according to the seven planets known at the time – they represented the divine macrocosm of alchemical astrology. On each of these stood emblematic images and signs, next to compartments for scrolls. Using an associative combination of the emblematically coded division of knowledge, it had to be possible to reproduce every imaginable micro and macrocosmic relationship in one's own memory.”⁴²

⁴¹ William Uricchio, *A Palimpsest of Place and Past*, (London, Taylor&Francis, 2012), p.45.

⁴² Peter Matussek, “The Renaissance of the Theatre of Memory”, in *Janus*, 2001, p.5. Available at <http://www.peter-matussek.de/>

Collective virtual memory is a combination of images and texts that are accessible by digital media and digital coding. In this study, digital media reflects virtually collected archive that is stored on monitors and screens.

“Don’t think of that thing as a screen, think of it as a window, a window through which one looks into a virtual world. The challenge to computer graphics is to make that virtual world look real, sound real, move and respond to interaction in real time, and even feel real.”⁴⁴

With this quotation in mind, computer screens or monitors can be seen as a bridge between real and virtual world which locates in a multi-dimensional environment. They have a powerful potential to collect and communicating diverse concepts in a multi-layered and complex system.⁴⁵ This virtual structure is the fastest means for encoding and creating a digital archive for users. Nam June Paik’s, a Korean-American artist, created projects “Megatron Matrix” and “Electronic Superhighway: Continental U.S” are perfect illustrations of this concept.

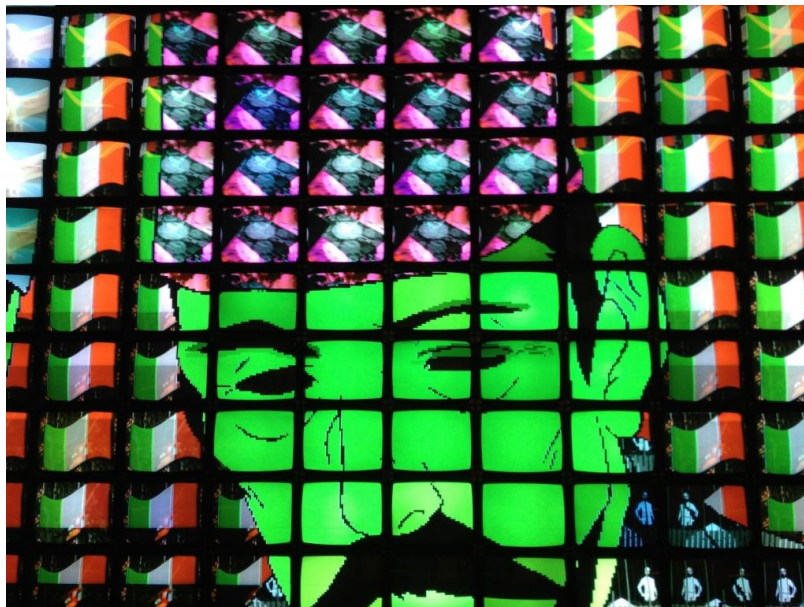


Figure 3.2.1: “Megatron/Matrix”, Nam June Paik, 1995.

Source: <http://electricshado.ws/megatron-matrix/>

⁴⁴ Frederick P. Brooks, “What’s Real About Virtual Reality”, *IEEE Computer Graphics and Applications*, November-December, 1999, p. 16.

⁴⁵ M. Neiger, O. Meyers, E. Zandberg, *On Media Memory: Collective Memory in a New Media Age*, (New York: Palgrave Macmillan, 2011), p. 1.



Figure 3.2.2: “Electronic Superhighway: Continental U.S., Alaska, Hawaii”, Nam June Paik, 1995.

Source: <http://superfuture.com/supernews/washington-d-c-nam-june-paik-global-visionary>

Nam June Paik’s exhibited “video sculptures” at The American Art Museum, represents a revolutionary understanding of display. In both exhibitions, he used screens as the medium to demonstrate the power of video art. In “Megatron/Matrix”, the installation of monitors is twofold: on the left side is “Megatron”, which consists of monitors aligned in straight rows and columns, is meant to reflect the wide reach of media; on the right side is the “Matrix”, where monitors are designed spiralling inward around a single screen, demonstrates the media’s impact on the individual.⁴⁶ This 215-monitor display of mixed images from the Seoul Olympics with Korean folk rituals and modern dance accompanied by unrelated sounds.⁴⁷ Similarly, the “Electronic Superhighway: Continental U.S”, he emphasized the imaginary role of media again with video flowing monitors. He divided the “video sculpture” using neon lights to outline a map of the United States. This was to display his

⁴⁶ For detailed explanation and videos please see, <https://spached.wordpress.com/2012/04/13/review-of-the-megatron-matrix-installation-by-nam-june-paik-at-the-american-art-museum/>

⁴⁷ Ibid.

understanding of the United States and its cultural expressions.⁴⁸ For example, he used a sequence from the movie “The Wizard of Oz” to represent the state of Kansas and images from the life of Martin Luther King Jr. to signify the state of Alabama.⁴⁹ Both works were displayed in architecturally simple and plain rooms with grey-painted walls, in order to capture the attention of visitors to the “video sculptures”.⁵⁰

The aim of the museum was to house a media installation that can be considered a virtual archive. This virtual archive mesmerizes individuals by allowing them to recall real world events; in other words, stimulate each memory, “individual archives”. Nam June Paik’s projects can be seen as sculptural version of virtual web museums as they offer multi-layered virtual space and information, which to some extent run parallel and diagonally connected to each other. To conclude, these multi-layered virtual space examples are unique for creating new kind of memory that is, virtual. In virtual memory, there is an informational syntax flows between virtual layers and originates different “individual archive”. Media, web, and augmented installations are the best vehicles for designing both virtual memory and artificial space.

3.3. Memory Display with House No. 05

The brief history of “memory” was provided as it is one of the highlighted subjects in the exhibition of House No. 05. It is specialized also with its objects that refer to the memories, thus it can be seen as a Modern curiosity exhibition. As part of the exhibition, the exterior and interior were peppered with classic items such as a yellow 1947 Chevrolet car or an antique radio, which were brought from the METU Science and Technology Museum that has an collection on technology and its development since ancient times. They are objects that trigger “memory”. Thus, there is a juxtaposition of Modern Architecture and “memory” in the exhibition. While the displayed object is House No. 5 itself, the accompanied drawings reflect

⁴⁸ <http://learningenglish.voanews.com/a/nam-june-paik-made-video-into-a-modern-art-form-122065029/114436.html>

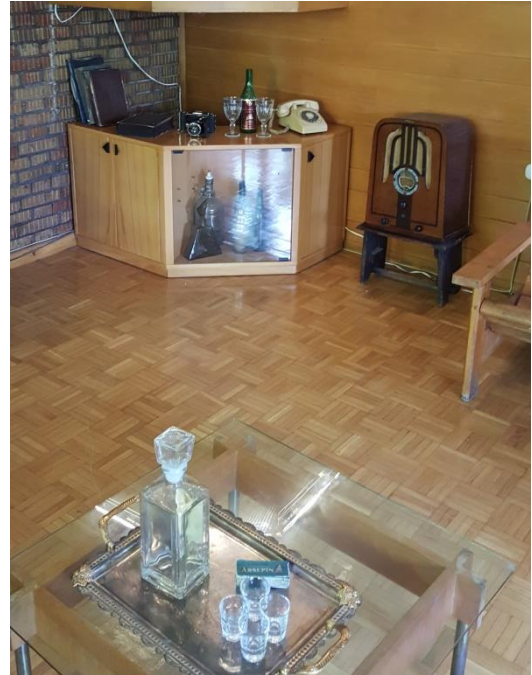
⁴⁹ Ibid.

⁵⁰ Op.cit, <https://spached.wordpress.com/2012/04/13/review-of-the-megatron-matrix-installation-by-nam-june-paik-at-the-american-art-museum/>

Modern Architecture, and exhibited objects representing the past illustrate “memory”. Other, exhibited items that emphasize “memory” are the videos and photographs that belong to those that lived there earlier. Narrations by previous tenants were on exhibition on videos that were displayed on the wall of the study room, which rounded out the exhibition. From the beginning of the exhibition to the end, visitors can sense of “memory”.



A



B

Figures 3.3.1: A. House No. 05, historical objects taken from the METU Science and Technology Museum,
photographed by the author.

B. House No. 05, historical objects taken from the METU Science and Technology Museum,
photographed by the author.

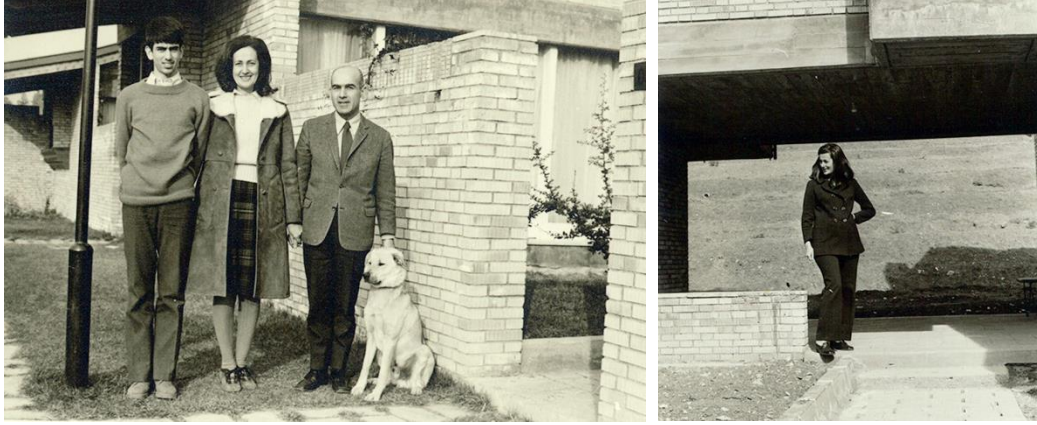


Figure 3.3.2: House No. 05, exhibited photographs
from Ahmet Özgüner

Here, juxtaposing photographic depictions of memory and Modern Architecture offers a different perspective to the exhibition. There is a contrast between Le Corbusier's famous motto "a house is a machine for living in"⁵¹ and the exhibition in "METU Lodgings". Although "METU Lodgings" can be considered a brick and mortar version of a Modern utopia in Turkey, memory and living experiences separate them from the harsh treatise of Modern Architecture that separates itself from the past and historical context. These experiences and memories of the dwellers were also a focus of the museum at House No. 05. By using old photographs and interviews with previous occupants of the houses, this house museum brought back to life earlier times. This is what differentiates "METU Lodging" from being simply a "machine".

⁵¹ Le Corbusier, *Towards a New Architecture*, translated from the thirteenth French edition and with an introduction by Frederick Etchells, (New York: Dover Publications, 1986), p. 4.



Figure 3.3.3: A revival of old memories in museum of House No. 5.

Photo taken by the author, 2016.

Recalling Stanford Anderson's thoughts on "functionalism" in Modern Architecture, in his "Fiction of Function", he claims that "functionalism" is a weak concept that dulled the understanding of both the theories and practices of Modern Architecture.⁵² He explains this idea in two parts; first, not all Modernists ever accepted "functionalism"; and secondly, not even self-proclaimed functionalists could fulfil their program without assistance from others.⁵³ Likewise, he claims that the elements of a building can be seen as "metaphorically functional":

"It is virtually impossible to deprive building elements of metaphoric qualities associated with various functions: portals and doors loaded with the significance of arrival or departure; windows as the eyes of the building or as the frame through which a controlled view of the world is afforded."⁵⁴

With this in mind, "METU Lodgings" bucking Le Corbusier's idea that "a house is a machine for living in" by virtue of its mechanical and functional aspects as well as its historical value and prompting memories. The "function" of "METU Lodgings" can

⁵² Stanford Anderson, "The Fiction of Function", *Assemblage*, no. 2., 1987., p. 20.

⁵³ Ibid., p. 22.

⁵⁴ Juhani Pallasmaa, "Space, Place, Memory, and Imagination: The Temporal Dimension of Existential Space", in Marc Treib, "Spatial Recall: Memory in Architecture and Landscape", (London: Routledge, 2009), p. 23.

be understood in a metaphorical sense and illuminated by the relationship between the social areas of the campus and privacy afforded by the houses.

3.4. On Architectural Memory

In architectural discussions, memory has been the subject of many debates. Spatial experience configures the architectural organization of memory. In other words;

“Built structure, as well as mere remembered architectural images and metaphors, serve as significant memory devices in three different ways: first, they materialize and preserve the course of time and make it visible; second, they concretize remembrance by containing and projecting memories; and third, they stimulate and inspire us to reminisce and imagine.”⁵⁵

As in the above quote, the role of memory and architecture in the field of museology becomes significant. Moreover;

“In an architectural context in which nothing is permanent and nothing is indispensable, and in a socio-political environment in which everything is possible, unconventional ways of 'preservation' become essential.”⁵⁶

There is no institution that can trigger memories more professionally and intensely than a museum. Museums, either virtual or physical, consist of many layers that generate knowledge when they come together under one umbrella. The more you enlarge your individual archive, the better memory you have to associate the knowledge garnered from the museum.

One of the exceptional examples that most effectively use architectural memory or architectural archive is the “METU Lodgings Documented” exhibition. It’s another aim is, creating an architectural archive with variety of documentation. Interviews with earlier tenants, three-dimensional renderings, photographs, all architectural

⁵⁵ Ibid.

⁵⁶ Ayşen Savaş, “METU Lodging: Representing Itself”, *METU Lodging: Diamond in Sahara*, op. cit. p. 25.

drawings including elevations, sections and details of the houses were archived for the exhibition. Additionally,

“The goal of this exhibition is to promote the production of ‘new documents’ by means of the active involvement of architects, architectural students, historians, theorists and critics. Here we will benefit from the definition of the term ‘curator’ as it is used in art world. ‘The words etymological roots attest that it ‘treats’, ‘cures’ art, with its intricate ways’. So does this exhibition as it not only makes architectural documents visible and understandable and treats them as museological objects identified, collected and preserved, but also creates and completes them to construct an archive for the promotion of architectural knowledge. In other words, architectural knowledge will be obtained by the actual making of documents and documentation. This critical act is conceived as a process, rather than an end product.”⁵⁷

This architectural documentation of the exhibition also illustrates the contradiction between memory and Modern Architecture. John Locke, an English philosopher, used the term *tabula rasa* to shaped thoughts on Modern Architecture as refreshing design principles and rejecting historical mind. Based on this idea, white walls, which were previously mentioned as a hallmark of Modern Architecture and museums, are examples of the connection between *tabula rasa* and Modern space. For Le Corbusier, all white walls, a purged city, a hygienic house, a cleansed body, the white canvas, the *tabula rasa* are components of a utopian Modern world.⁵⁸ They are the representative aspects of initializing memory. Ironically, white walls are striking planes of Modern museum space. That is to say, one of the elements of Modern Architecture that removes traces of history is used to display collections that trigger memories. This paradoxical situation provides a new style of architecture for museums and its technologically developed spaces generates the layout of virtual museums. In web museums, if the web templates modify museum space then the background of web templates can be seen as the virtual version of white walls. They

⁵⁷ Ayşen Savaş, *ibid.*

⁵⁸ Barbara Hooper, “Utopia, Death and Desire”, in Amy Bingaman, Lise Sanders and Rebecca Zorach, *Embodied Utopias: Gender, social change, and the modern metropolis*, (London: Routledge, 2002), p. 74.

both help display the collection and define the boundaries of space. While white walls emphasize the collection with their untainted surfaces, the web templates backgrounds draw attention to virtual archives due to their subtle design. Additionally, while white walls orient visitors to experience a museum space, virtual backgrounds render an invisible space that consists of links and buttons that visitors click and gain access to information.

To conclude, the House No. 05 exhibition reveals the relationship between memory and Modern Architecture in several ways. While the objects and archive show how memory can be documented, the house itself displays the aspects of Modern Architecture. Thus, this project can be seen as a mediator of these two concepts. This in-between situation also shows how it can exist in virtual space. The website of an exhibition should have both Modern influences and memory archives. Therefore, the “virtual matrix” of House No. 05 cannot be thought of without coding documentations of memory and signs of Modern Architecture.

CHAPTER 4

CONSTRUCTION OF THE DIGITAL WORLD

The “digital world”⁵⁹ is one of the most powerful environments that exists as it can change/impact the real world perception in many disciplines, including architecture. It is believed that the digital can influence architectural design, collections, displays, and so on. Today, this all-encompassing digital world is prevalent on the Internet. The main subject of this thesis is virtual museums that can be explored by surfing the Internet. The World Wide Web and the Internet are the vehicles for reaching virtual museums. Before examining virtual museums, the following offers a brief history of the Internet to enlarge the roots of them on web.

In 1989, the World Wide Web was invented by Tim Berners-Lee, a British scientist at CERN, the European Organization for Nuclear Research.⁶⁰ It was formulated and developed for sharing information between scientists at universities and institutes

⁵⁹ The origins of the digital world were established in 1969 by the United States government's Department of Defense project, called as ARPANET (Advanced Research Projects Agency Network). ARPANET was designed to provide a secure and survivable communications network for organizations engaged in defense-related research. (Please see: http://ocw.metu.edu.tr/pluginfile.php/348/mod_resource/content/0/Lecture_1.pdf). ARPANET provided three technical advances for the Internet: the first one is Transmission Control Protocol/Internet Protocol (TCP/IP) which supports data exchange between technological devices, such as File Transfer Protocol (FTP) or Simple Mail Transfer Protocol (SMTP); Xerox (I could not write a comment for some reason – do you mean Xerox came out of ARPANET – that is what I understand from what you are saying here) completed a long series of experiments that led to the development of the EtherNet; the other development was the maximization of the use of the network among institutions of higher education. (Stephen M. Marson, “A Selective History of Internet Technology and Social Work”, <http://libres.uncg.edu/ir/uncp/f/A%20Selective%20History%20of%20Internet%20Technology%20and%20Social%20Work.pdf?origin>). After many innovations in technology and increased network traffic, the roots of today's widest network were established. In 1983, Paul Mockapetris, a computer scientist and Internet pioneer, created the “Domain Name System” to compensate for the unexpected increase of addresses with an international system that has seven “top-level domains”, such as “com” for commercial, “edu” for educational, “gov” for government, “mil” for military, “net” for network organizations, “org” for non-commercial organizations, and “int” for international organizations. (Ibid.)

⁶⁰ For detailed information, please see <http://home.cern/topics/birth-web>

around the world.⁶¹ There is an incredible growth progress in the ability to search for and find information on the Internet. With the reach of the HTTP (Hypertext Transfer Protocol) and HTML (Hypertext Markup Language), expanded the World Wide Web, where documents with high resolution and large sizes can easily be uploaded. This success of the World Wide Web is based on three critical factors: unlimited links from any part of the Web to another; open technical standards as the basis for continued growth of innovation applications; and separation of network layers, enabling independent innovation for network transport, routing and information applications.⁶² In short, the Web offers an exceptional flow of information and data that is always innovative and widespread. What makes the Web the never-ending project is its flexible architecture and universal capacity that breaks down boundaries of distance, language and domains of knowledge.⁶³ Based on these properties of the digital world, the House No. 05 virtual museum will allow the real exhibition to become an enlarged, more informative and flexible space. As a result of many technological and artistic innovations in digital environment, the method of creating and preserving an archive had been transformed by contemporary senses. One of the most contemporary influences is this thesis' subject, virtual reality. Reviewing the process of transforming concrete archives to virtual is the primary focus of this study.

4.1. Comparable Platforms: Website design and Architecture

Digital environment and website design are more than those technical details written above. The preferences of users are composing the visible part of website design. From typography to colour, a website design needs “visual balance” that directly addresses the users. Similar to architecture, the technical process of a website can be seen as the structural frame of a building, while its representational part reflects the plan or facade and design of an architectural product. This chapter examines the steps of representative design of a website for the virtual reconstruction the exhibition of House No. 05 in virtual space. In the beginning, a designer should

⁶¹ Ibid.

⁶² From the conference named as “Digital Future of the United States: Part I- The Future of the World Wide Web”. Please see, <http://dig.csail.mit.edu/2007/03/01-ushouse-future-of-the-web.html>

⁶³ Ibid.

preserve the purpose of the website, just like an architect decides the concept of architectural project. Whether it is a personal blog, a business website, an entertainment web page, an educational website, each piece of content requires distinct design principles. For instance, while personal blog includes diaries or personal notes, a business website should involve formal information about the company, such as projects or certificates. Secondly, according to the function of website, there should be a plan or a scheme of information. How to gather and emphasize information can be related with the architectural sketches of a project. Templates of a website are comparable to the architectural organization of spaces.



Figure 4.1.1: Sample of a template.

Source: <http://www.wix.com/website/templates/html/blank/1>

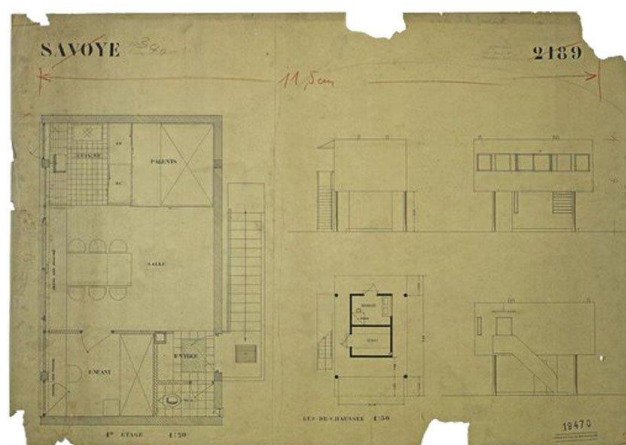


Figure 4.1.2: Original drawings of Villa Savoye, Le Corbusier, 1929.

Source: <https://www.inexhibit.com/case-studies/le-corbusier-villa-savoye-part-2-architecture/>

For instance, designing the entrance of a house based on the site can be related to the creation of the main page of a website; or the relation between spaces of a house plan is parallel to the association between virtual information and related links. In other words, choosing a website template means “architecturally” deciding the location of spaces on a plan and their relation to each other. The best website design is the simple formulation where the users can easily find the information they seek. Additionally, it should be easy for the administrator of a website to add or delete data as needed which calls for a spatial “flexibility”. For example, the of MIT Architecture website opens with a simple main page that shows main sections and events related to the Department of Architecture. There is only one button at the top of the main page that reads “Menu”, which is clearly categorized with five subsections: “Architecture + Urbanism”, “Art Culture + Technology”, “Building Technology”, “Computation”, and “History Theory + Criticism”.⁶⁴ These five have also their own subsections such as: “updates”, “program”, “degrees”, “subjects”, “projects”, “publications”, and “people”.⁶⁵ At the bottom of the main page, there is contact information and social media buttons for Facebook, Twitter and Google+. Therefore, different departments use the same subsection titles, a limited number of buttons are proof of the website’s simplicity and clarity. Therefore, the web page for MIT’s Department of Architecture, through the use of templates, is a well-structured website. Architecturally likewise, “free plan” in Villa Savoye which offers a plan organization released from any structural part and can be coordinated and transformed by various needs. Determining website typography, colours, type of graphics are the third part of virtual design. This part of the design is critical because every stylistic choice includes subliminal meanings, such as orange reflects “revolution”. On older websites, there are predominantly monochrome photographs and graphics and on business website designers choose the popular Times New Roman font in texts and more formal language to convey their tone. These subjective decisions can be also linked to the architectural example in this chapter, Villa Savoye. Its design epitomized Modern Architecture and the architect Le Corbusier accentuated this with his own stylistic innovations such as “free facade”, “pilotis”, “horizontal windows” and “roof garden”.

⁶⁴ For more please analyze, <http://architecture.mit.edu/>

⁶⁵ Ibid.



Figure 4.1.3: A view from Villa Savoye, Le Corbusier, 1929.

Source: http://www.bc.edu/bc_org/avp/cas/fmart/Corbu.html

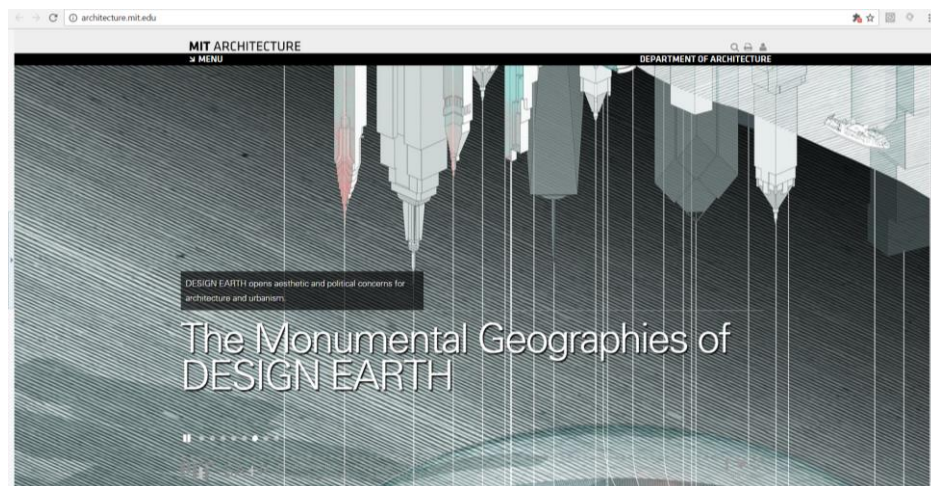


Figure 4.1.4: Main page of MIT Architecture website.

Source: <http://architecture.mit.edu/>

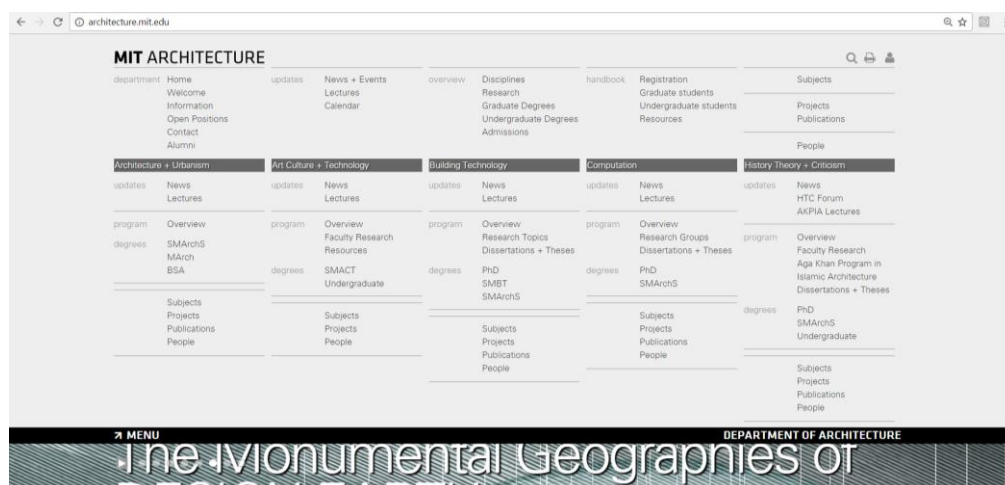


Figure 4.1.5: "Menu" index of MIT Architecture website.

Source: <http://architecture.mit.edu/>

Therefore, web design can be seen as parallel to architectural design. Both have similar processes and design criteria from the conception to the final end product.

Aside from constructed similarities, there is a significant difference between these two domains: that is the “context”. In architecture, the importance of the context has been expounded many times. As Diana Agrest states:

“Practicing architects and critics of architecture have repeatedly emphasized the need to relate architecture to its social or cultural context. Positions have been developed around such concepts as ‘contextualism’ and ‘ugly and ordinary’ by writers like Colin Rowe and Denise Scott Brown and Robert Venturi. Rowe, for example, speaks of an architectural contextualism that situates the object of design or analysis in its physical-historical surroundings in terms of formal elements and relations; Venturi and Scott Brown speak of the need to recognize mass culture as the necessary cultural product of our time and as a new source of inspiration for designers.”⁶⁶

Keeping this idea in mind, architectural design cannot be conceived without considering socio-cultural or physical environmental influences. In contrast, there are different kinds of contextual impacts in the virtual world compared to architecture. Websites are free-standing projects and can be designed based on individual demands/needs. Additionally, websites are the virtual spaces that create their own “virtual context” or “digital context” that do not contain any real life parameters and concrete surroundings. The contextual platform of a website design is free from socio-cultural, political or physical environmental realities. “Virtual context” embraces virtual algorithms such as data exploitation, data request, web server, etc. Also, a website’s connection between other virtual platforms such as Facebook, Instagram or Twitter, can be also considered part of the “virtual context”. Therefore, while architecture relies on many realities, web designs are structured by only non-real aspects that they themselves also create.

⁶⁶ Diana Agrest was quoted in Michael Hays, *Architecture Theory Since 1968*, (Cambridge: The MIT Press, 1998), p. 200.

4.2. Architectural Autonomy in the Virtual World

Autonomy is the word which comes from Greek *autonomia*, “independence”, derived from *autonomos* means “living by one’s own laws”.⁶⁷ Autonomy in architecture is a complex because architecture has a multi-disciplinary quality and that is why it is difficult to gain autonomy, meaning “freedom”. In architectural debates, Modern Architecture is often discussed. Because of being “critical” and its formal aspects, the autonomous nature of Modern Architecture has been reviewed many times. Discussions on whether architecture is “autonomous”, as Philip Johnson believes or “semi-autonomous” as Stanford Anderson claims, provides different perspectives on the subject.

One of the most important opinions on architectural autonomy was described by Emil Kaufmann, an Austrian art and architecture historian. In his “From Ledoux to Le Corbusier”, 1933, his conception of architectural autonomy is based upon Kantian thought on the “freedom of the human will”, rather than on philosopher’s writings on aesthetics.⁶⁸

Based on the influence of Kaufmann and Modern architects such as Philip Johnson and Le Corbusier, Modern Architecture was perceived as autonomous that lacked interest in the social preoccupations and focuses on “freedom” and “individuality”.⁶⁹ Johnson argues:

“Architecture, one would think, has its own validity. It needs no reference to any other discipline to make it ‘viable’ or to ‘justify’ its value. We might even question whether words like value or morals are applicable to an architectural style.”⁷⁰

According to Johnson, autonomy provides a place for architecture where is isolated from “other” disciplines and therefore independent. This idea of autonomy in architecture was reshaped by architects such as Peter Eisenman and Aldo Rossi. They portrayed autonomous architecture as an internal, disciplinary progress that

⁶⁷ <http://www.etymonline.com/index.php?term=autonomy>

⁶⁸ Tahl Kaminer, “Autonomy and commerce: the integration of architectural autonomy”, *arq*, vol. 11, no.1, 2007, p. 64.

⁶⁹ *Ibid.*

⁷⁰ Philip Johnson, “Where Are We At?”, *Architectural Review*, CXXVII, September 1960, pp. 173–75, reprinted in *Philip Johnson Writings* (New York: Oxford University Press, 1978), p. 100.

consists of ideal forms that break with tradition and subject to the constant movement of time and free of interests that are not related to some disciplines such as ideology or economics.⁷¹ This radical idea of autonomy refers to the pure and original science of architecture.

Stanford Anderson has a completely different point of view. For him, architecture stands on “quasi-autonomous” platform where the act of design can be seen as architect’s free will but also cannot be separated from the customs of social life.⁷² In other words, for him, architecture is neither purely independent nor dependent discipline. Anderson addresses two concepts of architecture as being “arbitrary” and “conventional” to support his idea regarding “quasi-autonomous” architecture. The “conventional” nature of architecture is seen as an untouchable hard core of architecture; while “arbitrary” posits it in a changeable, in both a cultural and physical context.⁷³ Furthermore, as he believes:

“...the notion of quasi-autonomy is in no way limited to architecture or matters of the physical environment. Conventions, whether touching on social or environmental issues (these can never be wholly separate), can be examined in terms of their quasi-autonomous relations.”⁷⁴

Here, it can be seen that the relation between autonomy and architecture can be interpreted in different ways. Today, Stanford Anderson’s idea seems fitting for architectural discussion because, as it was previously stated, architecture is a multi-structured discipline and it is impossible to isolate it from cultural and environmental environs.

“Autonomy in architecture today has made a swerve away from critical theory and toward a visual culture dispersed by and into the flows of digital space: the media technologies threatening to

⁷¹ Tahl Kaminer, op. cit.

⁷² Melis Gürbüzbalaban, “Autonomy: Re-Appreciation of Architecture”, Master Thesis (METU, 2004), p. 40.

⁷³ For detailed information please read, Melis Gürbüzbalaban, *ibid.*, p. 37.

⁷⁴ Stanford Anderson, “Mining Autonomy”, *Perspecta* 33, (2002), p. 37.

submerge architecture in their effects are met by an architectural reinvestment in the notion of autonomy.”⁷⁵

This quote supports that architectural autonomy has been established in virtual world. Differing understandings on autonomy depends on both the visual and digital ideal, is provided by immersive technology and media. In this chapter, the main topic of investigation is the autonomous identity of virtual museums. It is believed that virtual museums are architecturally autonomous places that provide highly advanced technological experiences. Spaces of virtual museums, called cyberspaces, offer autonomy that is generated through computational technology. Thus, technology can be seen as the first component of autonomy in virtual architecture and virtual museums on the Web. As Manuel Castells, a Spanish sociologist argues:

“(T)he Internet is a technology of freedom. It allows for the creation of self-directed networks of horizontal communication that avoid institutional control.”⁷⁶

As previously mentioned, autonomy encourages freedom and originality, and as mentioned by Castells, technology is another vehicle for freedom. Therefore, the main medium to make virtual museums autonomous is technology.

As stated by Stanford Anderson, the most significant point regarding the autonomy of virtual museums is that virtual world is independent from any “conventional” context. Opposite from having to design in real concrete spaces, cyberspaces are separated from cultural, environmental and historical influences. Therefore, virtual museums can be seen as autonomous and immune from any outside influences.

4.3. Virtual Museum of the Exhibition

The design process of the web museum is based upon the analyses, archives and emphases of the exhibition. To create this virtual museum, there should be a categorization of documents according to their time, space and connection to each

⁷⁵ Helene Furjan, “Autonomy”, *Hunch* no.9, (Rotterdam: Berlage Institute, 2005), p. 54.

⁷⁶ Manuel Castells, La Sociedad Red: Una Vision Global, (Madrid: Alianza Editorial Sa, 2011), p. 305.

other. This categorization is based upon these questions: what is the aim of this web museum; how can it be regulated; what are the main sections that can directly respond to the purpose of this web museum; which stylistic choices can fit with the subject; and what kind of a concept may define the aim and result of the exhibition.

One of the most interesting aspects of the real exhibition is its duration. As it was mentioned before, it was planned to be an exhibition for just one day and one hour. At this point it was considered fundamental to migrate this exhibition to a virtual space because in the virtual world the museum's existence can become permanent. Therefore, the first aim is creating a virtual museum of exhibition House No. 5, is to make it an ongoing process, which will preserve its "memory" and architectural style in digital environment. Another aim of the web museum is to transfer this live project to a broader space, which will give a universal quality to the concept and give access to a wider audience.

"It's a very good idea that artists might directly address the public, but we have the problem of information overflow in general, and so there is no quality filter within. We just get lost and we don't know how to choose and find what we want if everything is accessible. The question is: what should I be interested in, the artist living next door or one from another continent?⁷⁷

Bearing the above quote in mind, before laying the foundation of the virtual museum for House No. 05, specific records should be selected. To avoid becoming overwhelmed in the vast knowledge regarding the virtual museum, all related documents were categorised. It is believed that digital world is a virtual museum space where electronic documents are available. These electronic documents can be seen as the digital version of white paper. To be paperless, there should be consideration of managing digital information and maintaining the integrity of the document as the source.⁷⁸ Moreover, managing digital documents needs to answer

⁷⁷ A conversation on media and art between Dieter Daniels (formal curator of the media collection at the Center for Culture and Media, *Zentrum für Kunst und Medientechnologie*, Karlsruhe, Germany) and Valter Grassmuck, Tokyo, March 8, 1995, for *Intercommunication* magazine, <http://waste.informatik.hu-berlin.de/Grassmuck/Texts/ddaniels.e.html>. For more information, Sarah Cook, "Immateriality and Its Discontents", in Christiane Paul, *New Media in the White Cube and Beyond*, (London: University of California Press, 2008), p. 32.

⁷⁸ https://d335hnnegk3szv.cloudfront.net/wp-content/uploads/sites/1231/2015/08/Why_Electronic_Document_Management_.pdf

such questions as: what is a digital document; how can it be accessed and used; who will need access to the document; is the information sensitive; how long the documents are active and frequency viewed; and how long the information must be retained?⁷⁹

Digital documents such as digital archives, e-mails, websites, make up the digital world. They should be reliable and well-structured, such as original hard copy version. This trustworthiness of the electronic documents can be provided by the “metadata” such as, author’s name, document creation date, date of it last access, etc.⁸⁰ There are two main advantages in the electronic version over the hard copy version; accessibility and longevity.⁸¹ Electronic documents are “multi-user sources”, meaning many people can read at the same website content at the same time from different computers. Additionally, with digital documentation, the sources are long-lasting and protected in virtual world through technological means. This is what makes them more advantageous to the hard copy/paper version.

“Paper is a prison with four walls. At last we can escape from the prison of paper.”⁸²

As Ted Nelson, an American pioneer of information technology and sociologist, thought when he first saw a computer. There are many studies on Nelson in a technological context. One of the most innovative ones is, “Xanadu Space”, a digital hypertext space that can be seen as advanced version of website digital space in a “three-dimensional demonstration”.

“Conventional electronic documents were designed in the 1970s by well-funded conventional thinkers at Xerox PARC, who asked, “How can we imitate paper?” The result is today's electronic document--Microsoft Word format and the printout format PDF. They imitate paper and emphasize appearance and fonts. But much earlier, in 1960, the Xanadu project started with a completely different idea:

⁷⁹ Ibid.

⁸⁰ <https://www.seas.gwu.edu/~shmuel/WORK/Differences/Chapter%203%20-%20Sources.pdf>

⁸¹ For detailed differences between paper and electronic documents please see, Ibid.

⁸² Ted Nelson, from the demonstration of “Xanadu Space”. For detailed information please watch the video of Ted Nelson from https://www.youtube.com/watch?v=En_2T7KH6RA

since interactive screens are coming (who else knew?), we asked a different question: How can we improve on paper? We foresaw a new screen literature of parallel, interconnected documents.”⁸³

With this quotation in mind, Nelson developed three benefits that separate electronic documents from paper: “parallelism”, “arbitrarily rich transclusion structure” and “linking origins of content” while he was designing “Xanadu Space”.⁸⁴ In “parallelism” he strived to make documents easy to read and write; while “arbitrarily rich transclusion structure” provides editing in place; and “linking origins of content” demonstrates depth.⁸⁵ All of these properties reveal both the constructional and architectural design of “Xanadu Space”. There is a unique and autonomous space that occurs based on rational parameters. Architecturally, this space is an innovative virtual space in which many layers of information are interconnected. The walls of this virtual space can be seen as virtual white papers full of parallels. As Nelson declares:

“The system represents all pages as slabs within a 3D space, moving between 3D positions on user command. Highlighted sections of text are separate 3D objects (“tetroids”, named after a shape in the game of Tetris) connected by beams. Pages, tetroids and beams are all objects sworwing (swooping and/or morphing) together.”⁸⁶

⁸³ Ted Nelson from <http://xanadu.com/xUniverse-D6>

⁸⁴ Op. cit, <https://www.seas.gwu.edu/~shmuel/WORK/Differences/Chapter%203%20-%20Sources.pdf>

⁸⁵ Ibid.

⁸⁶ Op. cit, <http://xanadu.com/xUniverse-D6>

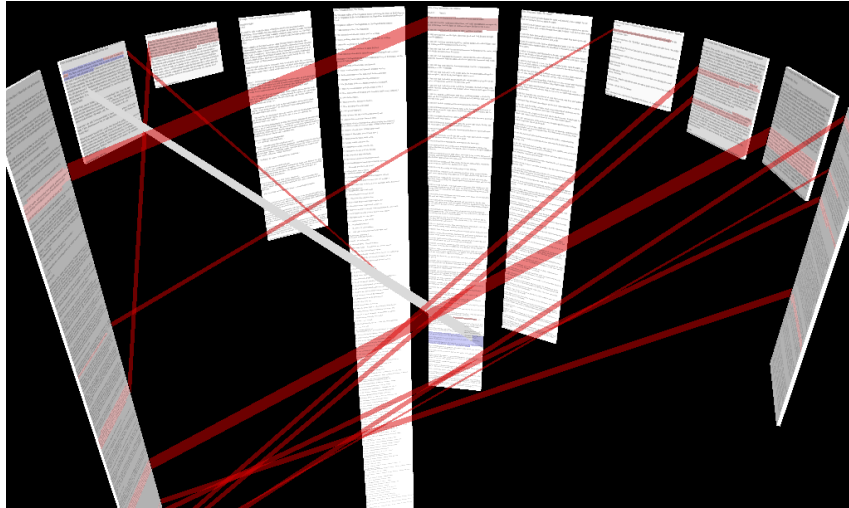


Figure 4.3.1: “Panoramic view of hypertext in Xanadu Space”.

Source: <http://xanadu.com/XanaduSpace/btf.htm>

Nelson’s virtual space by the use of hypertext is seen as the backbone of the House No. 05 virtual exhibition. Concepts of the “Xanadu Space”; “parallelism”, “arbitrarily rich structure”, and “linking other contents” were selected as the milestones of the virtual exhibition. While the slabs of “Xanadu Space” consists of hypertexts, our virtual museum includes additional aspects of different “virtual matrix” including: “Digital Environment”, Modern Architecture”, and “METU Lodgings, House No. 05” – the layers that also construct this thesis. Each parallel layer of virtual matrix has a coding and by deleting related codes, the specified subject, “METU Lodgings House No. 05” is highlighted. Therefore, it can be said that every layer of this virtual museum has its own matrix structure that refer to each other and when they come together, a new representative virtual space is formed. While the paper version of this space is this thesis, the virtual version of it is the website of House No. 05.



**Figure 4.3.2: “Imaginary Space” includes “virtual matrix grids” of the web museum,
designed by the author.**

Consequently, the digital world can be seen as a vehicle for transforming the way information is attained. Both paradigm and practical shift from paper to electronic documentation are seen and defined in the digital world, which is what makes this world comprehensive. The answer to the question: “how do we know what we know about the past?”⁸⁷ : Presently it is through virtual documents and the technology of digital world.

The style of web museum is based on the original museum. To achieve this, the colour of the text was selected to be orange and white, which are seen as a revolutionary and Modern colours. Most of the photographs of the pages were made monochrome to reflect the history and memory.

The regulation process of this website is based on a Modernist style of categorization. The main home page was designed to be comprehensible, simple and keep the focus on the subject: “METU Lodgings”. Therefore a powerful image of “METU Lodgings”, which was designed using the “virtual matrix”, is found on the

⁸⁷ Kristen Nawrotzki, Jack Dougherty, “Writing History in the Digital Age”, <https://quod.lib.umich.edu/d/dh/12230987.0001.001/1:4/--writing-history-in-the-digital-age?g=dculture;rgn=div1;view=fulltext;xc=1>

landing page. It was chosen to display only the text, “METU Lodgings Documented” for the opening of the main page, because text itself is as powerful as an image for display. Barbara Kruger, an American conceptual artist, created exhibitions that are one of the most influential examples of using text as an image. At the Hirshhorn Museum in 2012, she designed an exhibition called “Belief+Doubt” that consisted of space filled with text.



Figure 4.3.3: “Belief+Doubt”, Barbara Kruger, 2012.

Source: <https://elinacharinti.wordpress.com/2016/06/05/free-design-referat-presentations/>



Figure 4.3.4: The main page of the virtual museum,
designed by the author, 2016.

A complete and comprehensive explanation about the subject is found under the “Entrance” tab. After the monochrome photograph of the exhibition, the title “Study Process” was attached with many images belong to ARCH 723 students and their organization. In the middle of the main page, to introduce the team and supporters, there is a chart includes names in the team and companies that supported the exhibition.

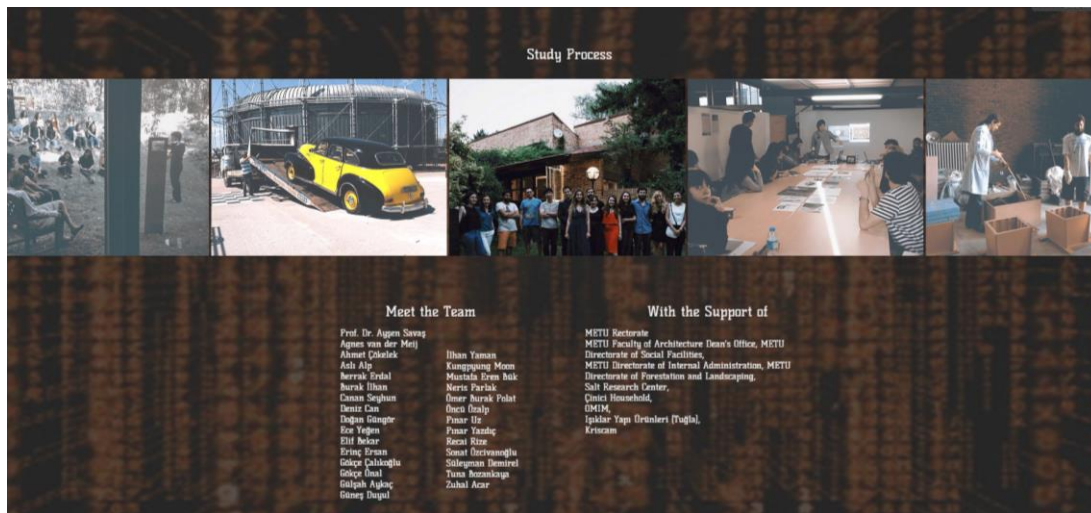


Figure 4.3.5: The main page of the virtual museum,
designed by the author, 2016.

There is also a link to another project from the Dutch village of Nagele because of the similar design process. A comparison between “METU Lodgings” and the Dutch village of Nagele was used to elucidate the method of the exhibition. The Dutch village of Nagele is located in the Netherlands and was the inspiration for the “METU Lodgings” exhibition. Briefly:

“...this long-term commitment, inspired by a very stirring permanent exhibition that was opened in the Netherlands that tells the story of the village through a variety of materials in different media, including photographs, films, interviews, publications, sketches, blueprints, architectural models, correspondences, newspaper clips, interactive narrations, and live storytelling. The preparation process of this exhibition, and thus the documentation method of the small

and modest Dutch village of Nagele, formed the general structure of the “METU Lodging Documented” project.”⁸⁸

At the bottom of the main page, a map of Middle East Technical University was attached and related telephone numbers were provided. In addition, there are Facebook, Twitter, Google +, YouTube, Pinterest and Instagram social media buttons on the right-hand side of the main page to provide more information.

In the “METU Lodgings” housing plan, houses are welcomed by a small front yard that connects to the back yard. The exterior door opens to an entry that has no boundaries between the living room, dining room, and kitchen. The 22-square-meter living room directly opens to the front yard; the 10.5-square-meter dining room and the 11-square-meter kitchen has another door that opens to the back yard. Therefore, it can be said that the ground floor plan of houses was designed using an “open plan”. The U-shaped stairs, which has a specially designed landing that overlooks the entire living room that connects the two floor plans, leads to the first floor plan there are two bedrooms, a bathroom and a room for studying. The 10-square-meter bedroom opens to the 11-square-meter balcony that has a view of the back yard, and the 17-square-meter bedroom has a small platform with a view of the front yard. As it can be understood from the floor plans, there is flow between spaces that provides free movement throughout the house. This plan concept provides spatially enlarged and open spaces. This type of open plan has a psychological function:

“The function of open spaces, buildings and building interiors psychologically is complex. We need to have control over our environment, to know where we are in space and time-to not be socially or spatially lost, and to have privacy for the behaviour in which we are engaged.”⁸⁹

Consequently, openings of the house suggest controlling both the interior and exterior spaces that gives feeling of being safe.

⁸⁸ Ayşen Savaş, Agnes van der Meij, *METU Lodging: Diamonds in Sahara*, op. cit., p. 7.

⁸⁹ Jon T. Lang, Walter Moleski, *Functionalism Revisited: Architectural Theory and Practice and the Behavioral Sciences*, (England: Ashgate Publishing Company, 2010), p. 65.

To demonstrate the “open plan” concept of “METU Lodgings” in virtual space, the second tab titled “Exhibition” directly opens to the house’s first and ground floor plans. The background photograph was selected to reveal again a “virtual matrix”, which is the symbol of a “grid”. In the original plans, the concept of “open plan” was emphasized with bolded walls and names of spaces were highlighted with an orange colour. Thus, when clicking on the names of rooms, the section titled “Views” populates and the photographs of these selected rooms open directly.

Houses are qualified with the usage of materials both in exterior and interior details. The exterior walls are made of brick and exposed concrete. The interior suggests harmony by containing natural wood flooring, wood panels and brick on the walls. The only adornment comes from the texture of the materials themselves. In addition, the simplicity of the materials and colouring, such as the room’s white-coloured walls, natural bricks, etc., is accentuated. These materials and details are other display elements of the exhibition. Therefore, their presentation in virtual museum is as significant as the overall views of House No. 05. A similar relationship between the page “Exhibition” and its subtitle section “Views” exists between “Exhibition” and “Details”. By clicking on the circular buttons on the floor plan, a second page directs the user to the section titled “Details” in which more detailed photographs are provided. To conclude, the boundaries between virtual pages were broken via small buttons that guide the visitor immediately to the desired related photographs. This mirrors the “open plan” concept in a virtual environment.

The third page titled as “Memory” aims at displaying the history of exhibition and House No: 05. To achieve this, there are “Before/After” images and old photographs belong to the different users of the house. Thus, with the “Memory” page, this website objects to create a revival of “Museum without Walls” of “METU Lodgings” exhibition.



Figure 4.3.6: Virtual museum, second page of the virtual museum titled “Exhibition”,
designed by the author, 2016.

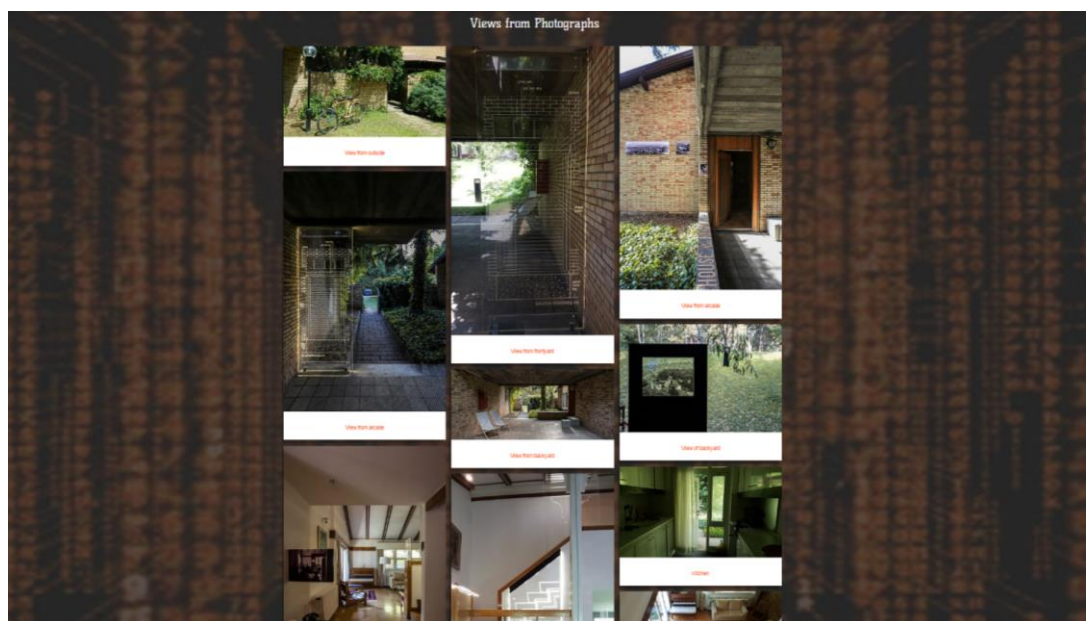


Figure 4.3.7: Virtual museum, subpage of second page, “Views”,
designed by the author, 2016.

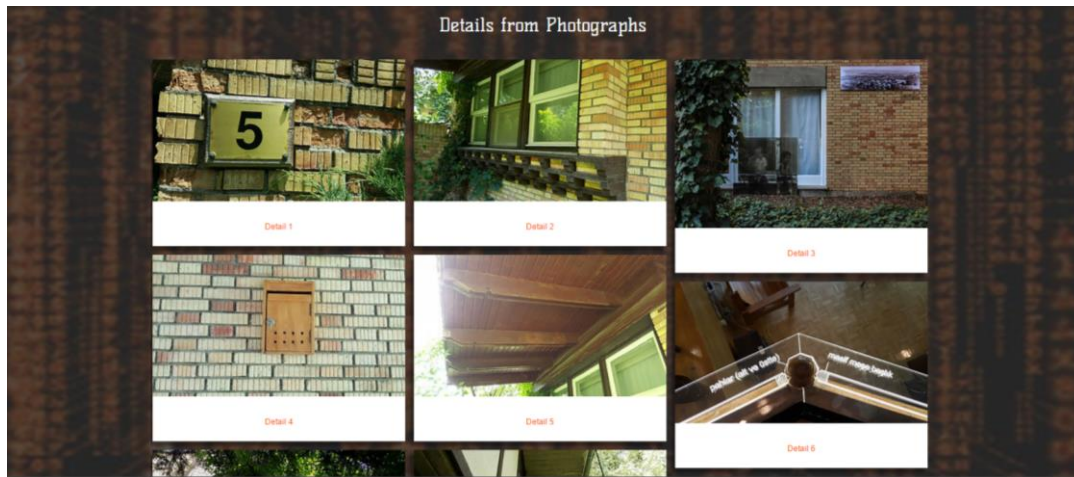


Figure 4.3.8: Virtual museum, second subpage of second page, “Details”,
designed by the author, 2016.

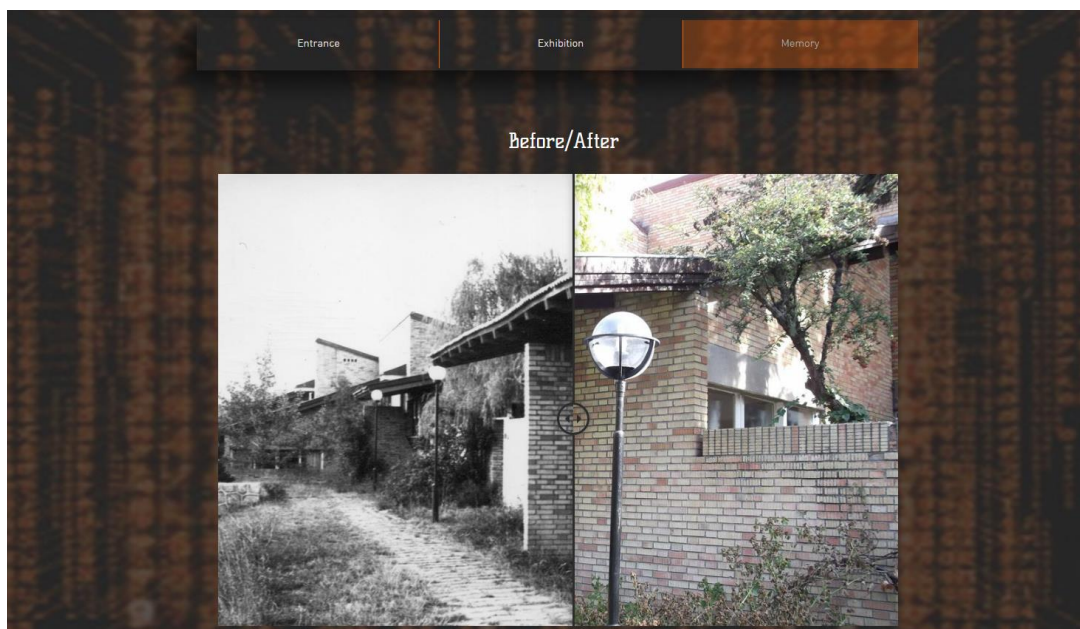


Figure 4.3.9: Third page named as “Memory”,
designed by the author, 2016.

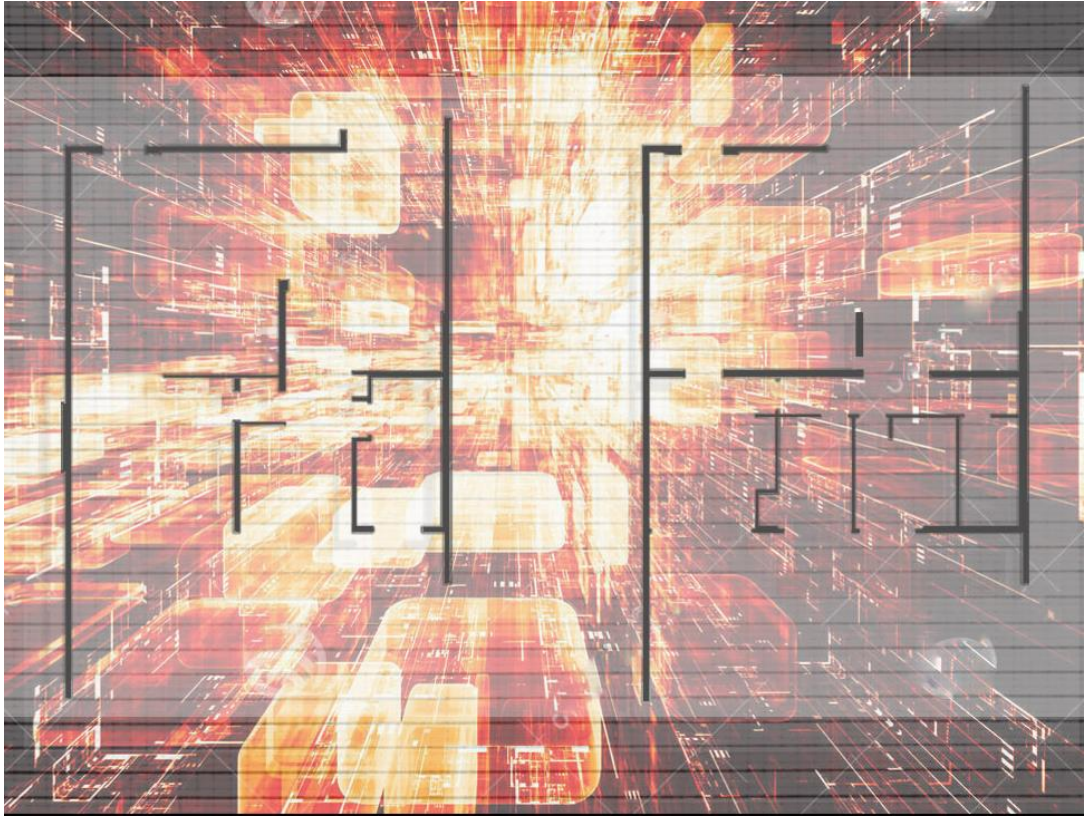


Figure 4.3.10: Juxtaposing “virtual space”, “grid”, and “METU Lodgings” house plans,
designed by the author, 2016.

As a result, although “METU Lodgings” were designed with pure architecture, virtually, they have a complex background and infrastructure. This background can be seen as a space where the time and concreteness lost their meanings. Therefore, it was aimed that the virtual museum of House No. 05 is designed as parallel to this concept.

CHAPTER 5

CONCLUSION

“The spaces between the actual and the virtual worlds and realities, the gaps and overlaps between these different spaces and states, including subjectivity and objectivity, constitute an underlying concern of both art and science. ‘Virtual reality’ (in the broadest sense) is not simply a useful method of simulation; it is a platform for exploring our ‘being’ in different worlds, virtual and actual.”⁹⁰

This study focuses on the relationship between architecture and “virtual reality”, in other words, the real and virtual worlds. In this thesis, new architectural space is seen as an “imaginary space”. The word “imaginary space” can have two different meanings: The first one is “image space” and the other is the “imagination of space”. “Image space” emphasizes the visual documentation of our memory. One such example is, Malraux’s “Museum without Walls”. “Imagination of space” means the way of bringing textual and visual documentation to compose a “virtual archive”. Therefore, this study is twofold: one is to analyse architecture in the virtual world and how it can be applied to the physical museum space organization; the other is re-systematizing the method of documentation and display on a web exhibition.

The virtual museum space was especially chosen in order to transform the physical space in to a virtual one as they are one of the most independent architectural spaces in both design and narration. Additionally, it has a unique structure in terms of categorizing the documentation and displaying archives. It is believed that virtual museums provide new architectural space for museology because “virtual reality” can enhance the “conventional museum space” with numerous innovative aspects.

⁹⁰ Christiane Paul, Challenges for a Ubiquitous Museum; From the White Cube to the Black Box and Beyond, op. cit., p. 70.

This project approaches to the subject of “virtual museums” from the perspective of website design. The exhibition at “METU Lodgings” House No. 05 was purposely selected based on its distinct framework that incorporates a variety of architectural concepts. “METU Lodgings” were designed using rich conceptual and spatial ideas. They provide an unadulterated and unique architectural space; therefore it is important to protect these houses from the deterioration that eventually will occur over time. They are a symbol of Modern housing in Turkey in both their functional and aesthetical characteristics.

It is believed that transferring this temporary exhibition, which was planned to last a day and an hour, to a permanent space can be directly achieved by structuring a virtual space to house its archive. The virtual display’s organization based on the classification of the documentation of the exhibition. Based upon this organization, the very practical task of designing the website for the museum of House No. 05 required a series of domains such as: “Modern Architecture” and its influences on the Middle East Technical University; “Digital Environment”; and “Memory”. Each domain was seen as a uniquely coded “virtual matrix” and their relationship is illustrated through “imaginary space”. The reason behind using the “virtual matrix” as a tool for connecting different concepts is due to their innovative aspect that highlights integrated concepts and the technological uses within cyberspace. The informational and visual archives of virtual museums are arranged according to a “virtual matrix” because it is one of the best vehicles that reflects the unlimited and “fluid” space of virtual museums. Moreover, this thesis defines the “virtual matrix” as a contemporary technological version of a “Modernist grid”, which attributes are to “flattened, geometricized, ordered, anti-natural, anti-mimetic, and anti-real”⁹¹. In a broader sense, the product of this thesis, the House No. 05 web museum, suggests an innovative, virtual, grid-based, and open-ended space.

In this concept of “imaginary space”, Modern Architecture is thought as one of the virtual layers of the web museum. It is depicted with the “virtual matrix” for emphasizing its own intensely informative world. “Functionalism” or the “open plan” can be defined as the codes of Modern Architecture that became the concepts of “METU Lodgings”. Furthermore, the main idea of the exhibition at House No. 05,

⁹¹ Rosalind Krauss, “Grids”, *October*, Vol. 9., (Cambridge: The MIT Press, 1979), p. 50-64. Available at, JSTOR Archive, <http://www.jstor.org>

“displaying itself”, highlights displaying Modern Architecture. That’s why, it is impossible to think the “imaginary space” of web museum without Modern Architecture.

The “virtual matrix” of memory refers to the collective virtual archive that was one of the markers in the exhibition of House No. 05. The memory archive of this exhibition consists of interviews with earlier tenants along with their photographs. Therefore, memory was dubbed as an “individual archive”, because earlier tenants of the house have their own set of unique memories. The impact of the life at “METU Lodgings” varies for each previous dweller. Architectural memory was displayed within the house itself. Exhibited drawings of the house display the architectural concepts and spatial layout. Memory became an incorporated the part of the web museum and virtually, its matrix is part of the walls of “METU Lodgings Documented” virtual space. The important notion in relation between “virtual matrix” and memory is, this thesis’s attempt in creating a new archive. This archive suggests an illusionary memory inside a multi-dimensional space and time. Therefore, with the web museum of House No. 05, providing a new memory was aimed and virtual archive was used as a vehicle for it. This virtual memory and archive start with the very first attempt of museums, *Kunstammer* and *Wunderkammer*, continues with Modern Architecture, METU campus and finally the museum of House No. 05.

In this thesis, digital aspects are seen as vehicles, not products. In other words, this study aims at creating a new architectural space rather than merely creating a website. Therefore, the digital environment is considered to be another virtual layer of “imaginary space”. Digital worlds such as “Xanadu Space” and “Megatron/Matrix” were helpful in inspiring the design of the conceptual schemes of the web museum. Moreover, they gave an autonomous quality to this “imaginary space” because their separated structure was different from any “conventional” context.

Consequently, virtual spaces on the Web are the mediators between real and imaginary spaces. Designing a virtual museum can be seen as endless, which starts with the documentation and continues to live on in virtual display. Today’s

informational age allows museum architecture be experienced through innovative, flexible and autonomous means. Although virtual museums on the Web are a part of physical exhibitions, they also have the codes from the real spaces. Thus, virtual museums can be seen as a new museum space for architectural documentation and display.

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