

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

**INVESTIGATION OF IMMATERIAL TECTONIC EXPRESSION IN
ARCHITECTURE**



MASTER OF ARCHITECTURE

Beyza Nur BATI

Department Of Architecture

Supervisor: Assist. Prof. Dr. Murat SÖNMEZ

NOVEMBER 2017

Approval of Graduate School of Natural and Applied Sciences

.....
Prof. Dr. Osman EROĞUL
Director

I certify that this thesis satisfies all the requirements as a thesis for the degree of Master of Architecture.

.....
Prof. Dr. Tayyibe Nur ÇAĞLAR
Head of Department

The thesis entitled “**INVESTIGATION OF IMMATERIAL TECTONIC EXPRESSION IN ARCHITECTURE**”, by **Beyza Nur BATI**, 154611012, the student of the degree of Master of Architecture, Graduate School of Natural and Applied Sciences, TOBB ETU, which has been prepared after fulfilling all the necessary conditions determined by the related regulations, has been accepted by the jury, whose signature are as below, on **02.11.2017**.

Thesis Supervisor: Assist. Prof. Dr. Murat SÖNMEZ
TOBB University Of Economics And Technology

Jury Members: Assist. Prof. Dr. Pelin GÜROL ÖNGÖREN (Chair)
TOBB University Of Economics And Technology

Assoc. Prof. Dr. Adnan AKSU
Gazi University

Assoc. Prof. Dr. Namık Günay ERKAL
TED University

Prof. Dr. Ertuğrul Rufayi TURAN
Ankara University

DECLARATION OF THE THESIS

I hereby declare that all information in this document has been obtained and presented in accordance with academic rules and ethical conduct. I also declare that, as required by these rules and conduct, I have fully cited and referenced all material and results that are not original to this work. And this thesis is prepared in accordance with TOBB ETU Graduate School of Natural and Applied Sciences thesis writing rules.

TEZ BİLDİRİMİ

Tez içindeki bütün bilgilerin etik davranış ve akademik kurallar çerçevesinde elde edilerek sunulduğunu, alıntı yapılan kaynaklara eksiksiz atıf yapıldığını, referansların tam olarak belirtildiğini ve ayrıca bu tezin TOBB ETÜ Fen Bilimleri Enstitüsü tez yazım kurallarına uygun olarak hazırlandığını bildiririm.

Beyza Nur BATI

ABSTRACT

Master of Architecture

INVESTIGATION OF IMMATERIAL TECTONIC EXPRESSION IN

ARCHITECTURE

Beyza Nur BATI

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

Supervisor: Assist. Prof. Dr. Murat SÖNMEZ

Date: November 2017

According to the statements within the scope of this study, all creations are based on the two domains of reality: the superior and the inferior. Though these two concepts may seem to be opposed to each other, the inferior reality is a reflection of the superior reality, indeed; such as the ontological inquiries and their manifestations or the physical manifestation of the spiritual. Similarly, it can be said that, architecture, which creates material situations, is built into its immaterial philosophy. So, it can be talked about immaterial concepts perceived within the material situations created in architecture. These immaterial situations are efforts of basing creations on theoretical foundations seeking for superior qualities and, builds on an intellectual journey into the inner worlds of universal realities. In this negotiation, it does not mean that the material is indeed gone or is ignored. On the contrary, materials come out as perceptual situations reflected upon, and thus, going beyond their initial and simple meanings. Therefore, for field of architecture or other disciplines, an immaterial creation involves depth of thinking, interpretations and implications other than those we see directly. From this perspective, the creative act of architecture is discussed related with how the recognition of the creation is established with the tools used.

Immaterial tectonics, by challenging the learned or habitual senses, are regarded as a search for quality or expansion of intellectual background towards the essence of creation/space and the superior. This discussion relies on contrasting sensations and offers a reexamination to reach active and creative results of architecture as a deliberate deviation from the existing architectural behavior. Immaterial tectonics is a perceptual architecture that seeks for darkness as well as light; emptiness as well as forms, actions as well as images; essence of material as well as the material and it is an expression of the attempt to rediscover the depths that exist in its meaning.

Keywords: Thinking the immaterial, Immaterial practice, Immaterial tectonic expression, Tectonic as the act of creation of architect, Meaning and expression in architectural creations.

ÖZET

Yüksek Lisans Tezi

MİMARLIKTA MADDESİ OLMAYAN TEKTONİK İFADELERİN

İNCELENMESİ

Beyza Nur BATI

TOBB Ekonomi ve Teknoloji Üniversitesi
Fen Bilimleri Enstitüsü
Mimarlık Anabilim Dalı

Danışman: Yrd. Doç. Dr. Murat SÖNMEZ

Tarih: Kasım 2017

Bu çalışmanın kapsamındaki söylemlere göre bütün yaratılar gerçekliğin iki haline dayanır: üst nitelikli olan ve alt nitelikli olan. Bu iki kavram birbirlerine karşıt gibi görünselerde, alt nitelikte olan gerçeklik üst nitelikli olanın yansımasıdır; varlığın ya da var etmenin ne olduğunun sorgusu ve bunların tezahürü ve ya manevi olanın fiziksel gösterimi gibi. Benzer şekilde, madde kökenli durumlar yaratan mimarlığın da maddesi olmayan felsefesinin içine inşa edildiği söylenebilir. Bu yüzden mimarlıkta yaratılan madde kökenli/ materyal durumlar için, algılanan maddesi olmayan kavramlardan söz edilebilir. Bu maddesi olmayan durumlar, yaratıları, üst nitelikleri arayan kuramsal temeller üzerine oturtma çabasıdır ve evrensel gerçekliklerin içsel dünyasına yapılan fikirsel gezintilere dayandırılır. Oluşturulmaya çalışılan tartışmada madde gerçek anlamda yok olmuş ya da önemsenmiyor değildir. Aksine, madde, üzerine derinlemesine düşünülen, bu yüzden de onun ilk ve basit anlamlarını aşan algısal durumlar yaratarak ortaya çıkar. Dolayısıyla, mimarlık alanında veya başka bir disiplin için, maddesi olmayan bir yaratıda doğrudan gördüklerimizden başka, düşünsel derinlikler, yorumlar ve kurgular vardır. Bu kapsamda, mimarlığın yaratma

eylemi, kullandığı araçlarla, yaratının farkındalığını nasıl kurduğu ile ilgili olarak tartışılmıştır. Maddesi olmayan tektonikler, öğrenilmiş veya alışılmış duyulara meydan okuyarak yaratının/mekanın özüne, üst derece olana yönelik nitelik arayışlarının veya düşünsel alt yapının açılımları olarak ele alınmıştır. Bu tartışma tezat duyumlara dayanır ve var olan mimari davranıştan bilinçli bir sapma olarak, mimarlığın aktif ve yaratıcı sonuçlarına gidebilmek için yeni bir okuma önerir. Maddesi olmayan tektonikler, ışık kadar karanlığı, biçim kadar boşluğu, imgeler kadar eylemleri; malzeme kadar maddesel özü arayan algının mimarlığıdır ve anlamında var olan derinlikleri yeniden keşfetme girişiminin ifadesidir.

Anahtar Kelimeler: Maddesi olmayan üzerine düşünmek, Maddesi olmayanın üretimi, Maddesi olmayan tektonik ifade, Mimarın yaratma eylemi olarak tektonik, Mimari yaratılarda anlam ve anlatım.

ACKNOWLEDGEMENTS

I would like to express my appreciation to my advisor Assist. Prof. Dr. Murat Sönmez for the patient guidance, constant support, constructive criticism and suggestions regarding this study.

I also thank the faculty members of TOBB Economics and Technology University Department of Architecture for their valuable comments and contributions.

I would like to convey my deepest thanks to my friends and parents for their great support, in particular, to my dad Muammer Batı for teaching me the value of knowledge and the other special personal reasons that are beyond the possibilities of acknowledgement.

TABLE OF CONTENTS

	<u>Sayfa</u>
ABSTRACT	iv
ÖZET	vi
ACKNOWLEDGEMENTS	viii
TABLE OF CONTENTS	ix
LIST OF FIGURES	x
1. INTRODUCTION	1
2. THINKING THE IMMATERIAL	7
2.1 Derivation of the Being from Materials	7
2.2 Derivation of the Being from the Immaterial	8
3. IMMATERIAL PRACTICE	13
3.1 Drawing Forth Of An Idea	14
3.2 Designing As An Intellectual Process	15
3.3 Forming As A Means Of Expression	17
4. IMMATERIAL ARCHITECTURE	27
4.1 Space As A Subject Of Architecture	28
4.2 Beyond The Limits Of Materials	38
4.3 Technique Revealing Out The Expressive Potentials	44
5. CONCLUSION	53
REFERENCES	59
CURRICULUM VITAE	63

LIST OF FIGURES

Sayfa

Figure 3.1: Kazimir Malevich, White on White, Oil on Canvas, The Museum of Modern Art, New York, 1918, (Heckert, 2015, p. 66).....	19
Figure 3.2: John Cage, 4' 33" (Url 1)	21
Figure 3.3: Donald Judd's untitled work, Chinati Foundation in Marfa, (Url 2)	22
Figure 3.4: Fred Sandback, Sculpture, Dia, Chelsea, 1998 (Url 3)	23
Figure 3.5: Frank Stella, Die Fahne Hoch!, Enamel on Canvas, Whitney Museum of American Art, New York, 1959 (Meyer, 2010, p. 48).....	24
Figure 4.1: Herzog & De Meuron, Eberswalde Technical School Library, Eberswalde, Germany, Project 1994-1996, realization 1997-1999 (Url4).....	30
Figure 4.2: Tadao Ando, Church of the Light, Osaka, Japan, 1999 (Url 5).	34
Figure 4.3: Peter Zumthor, Bruder Klaus Field Chapel, Cologne, Germany, 2007 (Url6, Url7).	37
Figure 4.4: Diller & Scofidio, Blur Building, for 2002 Swiss Expo, Yverdon-les-Bains, Switzerland (Url 8).....	40
Figure 4.5: Peter Zumthor, Thermal Baths in Vals, Graubünden, Switzerland, 1996 (Url 9).....	41
Figure 4.6: Herzog, Jacques & Pierre de Meuron, Dominus Winery, Yountville, California, USA, realization 1996-1998 (Url 10, Url 11).....	43
Figure 4.7: Dan Graham, Rooftop Urban Park Project, DIA Center, 1991(Url 12)	44
Figure 4.8: Le Corbusier, Villa Savoye, Poissy, France , 1929 (Url 13, Url 14)....	47
Figure 4.9: Mies van der Rohe, Farnsworth House, Designed by in 1945 and constructed in 1951 (Url 15)	50
Figure 4.10: Eisenman, House 2, Hardwick, Vermont, 1969 - 1970 (Url 16).....	51
Figure 5.1: Reading Between the Lines, Church by Gijs Van Vaerenbergh, Belgium, 2011 (Url 17, Url 18).....	54
Figure 5.2: Enric Miralles and Carme Pinos, Igualada Cemetery, Spain, completed in 1994 (Url 19).....	55
Figure 5.3: Christo and Jeanne Claude, Wrapped Reichstag, Berlin, 1971-95 (Url20).....	56
Figure 5.4: Le Corbusier, Notre Dame du Haut, Ronchamp, France, 1954 (Url21)	58

1. INTRODUCTION

Throughout history, architectural creations can be considered to be furnished by several intellectual and physical layers. Technological, substantial, structural, cultural-aesthetic, economic, political layers have been added to the simple/ essential state of the space, which we can take, particularly, as the subject of architecture. While each layer added on the essential/simple space furnishes such space, it also removes it away from its original qualities or the conditions of its being. It can be said that it causes a perception of a conventional space. Way of production and perception of architecture has become apparent, material and known. Modernism has considered space as a rationalist and functionalist volume arising from accumulation of knowledge with a formalist attitude. Even the resolutions belonging to the structure have come to be obtained from situations based on the known.

This study negotiates the formation, essence, and root of the architectural creation instead of the architecture which is built on today's great amount of information accumulated throughout the history. Instead of the production condition of space and related architectural perceptions of contemporary architecture in which knowledge and content have fallen into place, this discussion aims to the evaluation of the architectural design field through a different perspective; acquisition of new intellectual tools for the theoretical criticism area and finding different ranges of ideas and production in the design area. It offers a discussion of inner, spiritual and metaphysical profundity and thinking on other possibilities for creating spaces by getting free yourself of the learned knowledge.

In order to define, even in an obscure way, the essential/simple state of architectural creations, mainly space, which is the primary reason for the existence of these creations, it was investigated how these got form and evolved in thoughts, away from the conditions for the physical being. This research is questions the perception of the world that stems from the material. With the act of creation, which we have acquired at the end of this questioning, forms of perception justifying the physical conditions

come out. These forms of perception involve the idea of the creator and explanations about the superior. So, the essence and the uniqueness of a creation that is independent of all the layers covering the creation can be perceived today.

It is, in fact, the material architecture that is built within the philosophical negotiations over immaterial through the material itself. It is because philosophy deals with the material from its beginning and existence. This shows that this method enables the idea of rejection of all learned information and the formation of a physical reality from a natural reality, hence, being open to all expression potentials with which it is described.

In this study, the negotiations about architectural creations or essential/simple state of a space does not involve the reasons for primary and structural spatial productions meeting the needs of human beings such as accommodation and protection. The study is focused on the effect of ideas or metaphysical expressions of the human beings, intended to understand and explain themselves and their surroundings with space's process of becoming entities, beyond the physical requirements.

In this context, structure of thesis progresses as follows;

First, it is necessary to negotiate, clarify, and understand the implications of how the human's creation is formed of thought and the material. It is important to know how an architectural creation and its fundamental element, space, is created and comes into existence in the most essential and pure form. This understanding can be related to the humankind's opinions about the creation or existence of himself, the world, and the universe. Our thoughts on how we see and perceive the physical world are related to the material on the one hand, and on the other hand, how the material is created or exists. For this reason, the idea has always existed for the explanation of the material that, there is a superior construing and justifying and ascribing a meaning to it the essence obtained from those forms the source for the physical realities we perceive in the world. Our ideas and perceptions about the creator have used the act of creation and the material, and they also have led to several implications on how the creation comes into being.

Here, the act of creation brings a perspective to our way of perceiving the material world. Today, there is a concept of reality negotiated over the things we see and perceive in the material world. But the negotiations made in the history of philosophy

have based all creations on a type of reality perceived on the unseen and transcendent. There is a tendency to reason all these physical realities with an "essence" outside the sensation, which cannot be directly acquired by the human being. For example, in Islamic philosophy, the absolute being is the reason for everything we perceive in the physical world and manifestations of the essences/samples originating from that, thus, they are only the shadows of the supreme reality (Rustom, 2014). Or with another example, through a Platonist point of view, all the things we perceive in the material world are modelled on eternal, immaterial and ideal forms (Platon, 2015). It is understood that in the material world created or existed, the things we perceive through our senses are, indeed, inferior and bear traces of the superior.

It can be said that for the humankind, explaining the material and immaterial as getting into relation with the transcendent/ leaving traces from the transcendent, re-formation of the material or the physical being is an implication derived from the questioning of the creation of the superior or the creator itself. Just as philosophical expressions define the material as the shadow of the transcendent on a common ground, to seek for the transcendent in material situations created by the human being as a creator, is pursuing the shadow. The architect or the artist also processing, transforming, and positioning the material with the conscience, get closer to the transcendent in this way. Pursuing the shadow is building an idea of Immaterialism by using the material which is the reflection of the creator. In this way, the artist or architect get closer to the creator through its creation or space and progress towards a physical transcendence. The simple state of the creation or the essential space is the result of the references to the physically transcendent and to the search of the human being, pursuing the shadow, to immaterialize the material.

As the act of creation is understood within the context of material or immaterial conditions, the human being is deemed to have seen himself to be related to/close to the superior or the creator. For the human being who sees the transcendent as the creator of himself or the universe, who makes judgements at the end of the questions on how it creates and who sees the material as the reflection of it, the organization/formation of the space as a conscious action is the process of the acceptance of the architecture as a creator. When we set out a situation where the architecture can also be accepted as a creator, we can talk about an architecture creating ultimate realities instead of an architecture creating physical conditions. An ultimate

reality is a state of being a part of the transcendent, the actual reality. When the human being understands the superior, the creation comes into existence as a result of his recognition of its creative power and the desire to create something like that. This has led his use and transformation of the material as a tool of creation. Therefore; the creative act of architecture is shaped on the basis of the idea to present the creation with its most basic and essential state by organizing, shaping, and transforming the material. Thanks to the actions consciously developed by the architect, there will be a concept away from the directly sensed, in other words, from the secondary reality, a concept which makes the human being question the things and reach the superior.

The Renaissance period was a new term in which the human brain's perhaps the most unique feature could be extensively externalized to see the potentials of people, to realize that they have no boundaries in the fields of art, such as painting, music, literature, and architecture (Şentürk, 2016). The concept of architecture considered as a problem today, which is built on piles of information, must have recovered from its burdens thanks to this new period which is interested in the works passed through the intellectual stages. Architect who value intellectual production more than producing over the materials¹ is now free to explore every possible expression. Plato, whose works had been explored at that period, and his views were influential and the theories he establishes on the material, and the act of creation must have influenced the field of architecture on the basis of these two concepts. In this regard, architects seek for the superior in any type of interest that will pass through the intellectual filter.

The architect's designer/creator profile, representing the creator and bringing both himself and the others closer to transcendence with his space, can be basically related with organization of the material. Architectural tectonics can be seen as the tool for reaching the superior to be the reorganization of the material with the idea of creation. The architect reflects the universe, himself, and his act of creation in the tectonic expressions of the representation of the transcendent. It can be said that tectonic expression is the result of the humankind's perception of the world and the

¹ In the Middle ages, arts and architecture were 'confined to the artisan's guilds, in which the painters were sometimes associated with the druggists who prepared their paints, the sculptors with the goldsmiths, and the architects with the masons and carpenters' (Kristeller, 1990, p. 176). However, in the scope of this study, attitude of an architect to production is consider like Alberti's specification 'It is quite possible to project whole forms in the mind without recourse to the material' (On the Art of Building in Ten Books, 1988, p. 7).

existential references it makes. Tectonic, by its definition, is a concept questioning the poetic situations in the creation's way of formation, indeed. Such that, Mallgrave refers to this concept with expressions like the 'art of space creation' (Introduction of Style in the Technical and Tectonic Arts, Or, Practical Aesthetics, 2004, p. 48). On the other hand, tectonic, in an architectural creation, is a visual thing with a scene. This scene is established through the internal relationship between the subject, technique, and material of architecture.

The concept of space, which is suggested by Semper to be the essence of architecture, can be deemed to be the subject of architecture. Here, space must be considered to be a connection, bond or a relation instead of mass. So that, space has arisen as a concept related to the situations internally adopted by the individual, which cannot be explained with the terms he senses. The essential space is created with the same process. Thus, it involves the immaterial in its experiences.

It can be said that the matter of architecture is the material, which is frequently thought over. Here, the ideas that are mostly related to form and less related to the material, are rejected. An architectural consciousness is obtained that examines the qualitative features of materials and turns them into quantitative features. New meanings of the material are found by focusing on qualities like permeability, lightness, and mobility instead of durability, permanence, and heaviness. In this way, the structures can derive from invisible, floating, flying materials that may have even become a part of the everyday life. If the material can find an appropriate answer to the reason for its presence there, it melts in the whole of the creation, and it even becomes invisible.

There should be an idea to build a structure that will mostly free the creator's own design idea, which will be released from the structure building techniques, and even be designed and get integrated into the whole. Semper's *Bekleidung* theory is one of the best method for the development of such situation. This theory, which prioritizes the conditions for the structure to exist in the horizontal dimension, instead of the concept of focusing on the building facade due to the concerns about enclosure and protection, enables considering the periphery and the load-bearer as separate from each other (Semper, 2004). In the future, the load-bearer will get integrated to the holistic idea of design and remain as an element that does not produce any detail or, thus, disturb the individual's perception, which will keep its function confidential in the

experiences of the creation. It can be said that this will actually enable the creation of an identity for each new structure and reveal out the fictional potentials of the creation.

As a result, it could be said that; immaterial tectonic expressions create the ultimate reality where the transcendent, the actual reality is questioned, and which exceeds five senses and contains hermeneutical depth for the individual. The way of generating, such as Semper's suggestion, overcomes structural problems and becomes open to all expression possibilities. 'Material', as the tool for architectural creations, is the basic element of physical being. On the other hand, if such tool relates its existence to reasons, it melts within the wholesome being and becomes 'immaterial'. The things that exist in result is the spatial saturation of the void which creates a deep satisfaction on the perception.



2. THINKING THE IMMATERIAL

This part of the article negotiates the material, and thus, the immaterial through philosophy. Because philosophy is a unique space to discuss the material from the beginning, without the burden of information or other ideas on it, and in this way, negotiation of the conditions for the existence of architectural creations can be based on the theoretical foundations to obtain from here. The question ‘what is matter?’ can be start the discussion and form the relationship between the idea and the existential roots of the creation. That the idea of matter is a kind of concept limited to what we sense or what arises out of our sensations to become matters is the field of research and inquiry in this study. Is the material a kind of concept limited to what we sense or what arises out of our sensations to become materials? The theoretical framework of the study consists of these questions: how the factual situations exist or what causes them to exist and the relationship between them and the roots of creations.

Architecture, also, creates factual situations. In order to found a base for the creative actions of architecture, discourses on existence or creation have been studied. The most basic question of creation seeks to find out what the being, formation, and existence mean. Since the Greek philosophy, these inquiries made to reach reality have gained different dimensions, and religious philosophers have become followers of these questions with new interpretations. It can be said that in general terms, the human being's process of questioning this reality is a process of purification and simplification. It can also be seen as the process of getting rid of the effects of the usual senses and the daily life. The reality that architecture will try to achieve shall also be the progress from the concrete and visible; the objective reality of the senses to the virtual and the invisible; to the totally mental-spiritual and transcendental.

2.1 Derivation of the Being from Materials

It can be said that it is necessary to understand the relationship between appearance and reality in order to make sense of the physical conditions around and to find out what is

actually exists. This phrase is, for example, for Thales, regarded as a pioneer of Greek philosophy; is deemed to be a journey from the unity to the multiplicity, as substances deriving from the material. For Anaximandros, the unit here is that an indefinite, quantitatively unlimited material essence is the basis of the first existence, which is an uncertain being not identical to any sensory material, an abstract principle. For Anaximenes, the reality behind the appearance, the unity behind the multiple, which can be comprehended by mind, bases the whole universe to a single known material, claiming that everything has derived from air (Cevizci, 2009). From here we can see that they think the matters are derived from an abstract or concrete material.

It can be said when the discourses on existence regard the unity behind all factual realities as a material, a permanent and unchangeable structure, the phenomenon of change in the material cannot be explained. However, Herakleitos explained the process of existence with the concept of regular change and regarded unity more as the unity of the order which the model, i.e., the things changed with (Sarı, 2016). According to him, fire is archetypal form of the matter because fire reflects the transition from change and unity to the multiplicity the best, experiencing the process by burning and destroying (Alova, 2008). We can say that as fire is a moving thing or a movement itself, that is, it is the process of transition from unity to multiplicity, it is actually at a point where the action participates to existence.

In order to found objectivity on a theoretical base, we can say that the first ways of thinking were on "existence" as there were no thoughts about creation from nothing or the possibility that the material world could be a beginning for the time, as well (Cevizci, 2009). This, in fact, causes the material world to be explained through the visible. By incorporating an action to existence with the concept of the process that is integrated into the material, the way is opened for the development of the concepts of 'creation, bringing into being.

2.2 Derivation of the Being from the Immaterial

Parmenides can be seen as a transition point for discourses that seek answers to questions on being not in the material but in the superior. We can say that the existence tries to solve the question that is previously put forward, which is; How does the primary 'one' turn into the multiple? Starting to look at the being from the perspective of multiplicity, and rejecting the formation and change, he defended the concept of an essential being (Cevizci, 2009). In this sense of being, the essence is adopted as the

true expression of the being, whereas the change is just the appearance (Sunar, 1971). So, multiplicity is the world of appearance for him.

According to Parmenides, it has no parts; it is indivisible, continuous, whole, homogenous, complete, immovable, and infinite (Sunar, 1971). By ascribing such qualities, he glorifies the original "one" being. It is a way of designing the existence of a reality other than the one addressing the senses. It suggests the absolute unity and reality of the One. Multiplicity and change are solely illusions.

In the school of Elea, these views of Parmenides were discussed, and ultimately in the Ancient Greek philosophy, it was found to have a great influence on the questions about the being, which is apparent from the fact that the following discourses developed from the questioning of his views.

Plato, who later deals with the problems of metaphysics, adopts the view of the school of Elea, however, also believes that one can only have assumptions about the world of appearances, which is not totally unreal but creates an absolute illusion.

When we look at Plato's thoughts on being, we can say that he has a four-level understanding of reality. Ahmet Cevizci explains this understanding as follows; the most real and valid things for the being are the general ideas. The beings and qualities in this world are the perfect replicas of the ideas. There are ideal beings or selves dealt by mathematics which comes one level below. The sensational world, on the other hand, shows the total of the changing individual beings, which are the shadows of ideas. The lowest level consists of the images or illusions of the sensory individual beings, which are generated in liquid or sunny contexts. In terms of reality, the world of ideas is the world that actually exists, whereas the world of phenomena is a reflection, shadow or copy of it. For this reason, self-existing ideas come out as phenomena's sources for being. Transcendent ideas inherently come into the world thanks to their examples or individual copies trying to like their originals (Felsefe Tarihi, 2009).

Ideas are non-changing, immaterial, eternal and everlasting essences or patterns and the visible objects are just pale copies of them. Just like the 'One' of Parmenides, they have an eternal-everlasting and non-changing existence. For Plato, an idea is not an existing thing, it is a thing that exists in reality that is completely real and the thing

that is truly what it is (Cevizci, 2009). An idea is not a concept about something but the essence, the nature of that.

Regarding the ideas as the things that actually exist, opens the way of idealism in Greek philosophy, which has mostly got shaped through a materialist point of view until today. Now, the being will no longer be explained with the visible only, but it will turn into a superior concept envisaged in mind. It can be said that just as the relative assumes the absolute and the missing assumes the perfect, the immaterial is a prerequisite for the material. This means that each sensed being must be interpreted through a superior being, which is beyond the perception of the five-senses. From this point of view, there has to be a perfect absolute. This perfect absolute is an immaterial and irreducible reality, the existence of which must be pre-assumed for the existence and recognition of the world. This does not mean to say that, as phenomena exist, the absolute has to exist, too; on the contrary, it means to say that the phenomenon can exist by means of and for the absolute being only. Similarly, Plato's approach claims that as there is a phenomenon, there also has to be the idea, as its prerequisite. Although it is possible to design a world consisting of ideas, it is not possible to speak of the existence of the world of phenomena without the existence of the world of ideas.

Just like the discourses of Plato, any religion, whether it be Islamism, Christianity, Judaism, Buddhism, or Hinduism, discusses the being on the basis of the idea of a 'supreme being' that is beyond the senses. While the question regarding the identity of this supreme being remains the same, the explanations may change. Coomaraswamy explains this as the mountain metaphor where all the ways lead to a single summit; all the major religions in the world have valid claims that must be respected and comparatively understood in order to find the reality. While these claims show differences at the base of the mountain, they are all gone when looking at the top of the mountain and reach a single supremacy (Coomaraswamy, 1979).

For example, according to some pioneer Turkish Islamic philosophers and Sufis like Al-Farabi and Ibn-Arabi, the being exists from the 'Absolute Being' and its reflections. Two different expressions are used to describe this approach; *Wahdat al-wujud*, the unity of the being and unity of the visible. The being here is a single body, the God's body. And everything that exists joins a state of body necessarily. Because nothing in this order can avoid the God's Body, there is no way of existence that is not based on that. God's Body is essential and anything other than that is dependent on it for

‘ontological need’ (Rustom, 2014). The one being here, like the ‘one’ of Parmenides, is superior; infinite, complete, and does not need anything; and it is needed for being.

Plato stands out in Islamic philosophy with his certain qualities and his principles have been comprehensively discussed by many philosophers. For example, from Plato's point of view, ‘form’ is ‘mithal’, which is a term referring to likeness and similitude (Akkach, 2005). For example, Alam al-Mithal mean ‘the world of similitudes’ or the ‘realm of images’; timthal, which is derived from mithal, means statue or image and the timthal of a thing means the shadow of that thing (Koliji, 2016). Here the word ‘mithal’ evokes the sense of being the shadow of a superior reality the emergence of which is strongly felt. It is like in the case of reflections of the true reality put forward as ideas or essences by Plato.

The being can be assumed to have a specific philosophical form of division. Plato makes this division as ‘sensible’ and ‘intelligible’, muslim philosophers continue this division as ‘al-hissi’ and ‘al-akli’ (Akkach, 2005). The common idea here is that when the intelligible is somehow materialized and reduced to five-senses, it always remains as inferior. But still, the actions performed within the framework of these questions are the questioning of the being and creation. In this regard, it results in being in search of the esoteric knowledge, which means certain values go beyond objectification in a single visual.

In this context, there are two different states of being in all this discourse; the superior and the inferior. Though these may seem like two different concepts, the inferior can be thought as the reflection or shadow of the superior, indeed. For example, the material world exists due to the superior called as the essence, core, idea, or creator. It must be sensible (visible, audible, etc) to know these superior qualities, however, these senses must be the tools for understanding the reality. Understanding the reality requires getting rid of all the limitations of our senses, which cause us to have physical concerns. The architectural creations, which are inseparable parts of the sensible world, must be considered concerning the duality that emerges here: theoretical knowledge trying to understand and explain the essence and the manifestation of the creation. With this kind of approach, the creator (architect, artist) seeks to leave the traces of the superior on the missing and weak material.

Even if it is started from a mystical or metaphysical point of view as a method of thinking, by this method it can be attained a deeper understanding and the point of unity in the physical stance of reality. As in the Neoplatonist discourses, which are based on the Plato philosophy and greatly influence the first Christianity and the mystic philosophy that developed in the Muslim countries, it can be suggested a way of creative production that blurs the sharp line between superior and inferior, transforms the duality into a single union. This way of production can be explained by emphasizing the power of an unique essence to shape a matter. The essence which can be defined as the main unit of something, the point of origin or cause, is the key of existence. Formation begins with the knowledge of it, and the creation forms in other dimensions of human horizon and then finds physical existence. Forming is therefore a completely immaterial process, and the form exists by being released from the material.

It is an important debate how the evaluations about explanation of entity or existence effect in the field of architecture. Ideas that describe the object as a reflection of the creator or a perfect idea make consideration inevitable for generating architecture and architect. Architecture is a form of creation. When we regard the architecture as a creator, speaking of him as a person creating things from materials would certainly mean underestimating his actions. On the other hand, relating it to the superior would not mean to disuse material, a physical non-being, but to reach more creative situations and fictions by using such physical states as a ladder. This will not mean that matters are shaped by ideal forms like Plato said, but to say matters are related with the intellectual. So, at this point where the inferior meets the superior, we will see the immaterial architecture. It is because architecture will create factual conditions again but will bear superior features. So, the concept of the immaterial that will be defined here will refer to the world of ideas, the intellectual process in some ways. Isn't this process necessary for defining the being accurately, indeed? Then, architecture must also be subjected to these processes for the interpretation of its creations. In this way, the architecture will recover from the sense of secondary in the view of the being governed by philosophy.

3. IMMATERIAL PRACTICE

The reflection of all physical conditions, the superior, and the view it is a shadow of can find a match in architecture and in the situations it generates. Architecture both has material conditions and an immaterial intellectual process that will make one question the superior. According to Vitruvius, who claims that these two states cannot be separated from each other;

“Architects who have aimed at acquiring manual skill without scholarship have never been able to reach a position of authority to correspond to their pains, while those who relied upon theories and scholarship were obviously hunting the shadow, not the substance” (Mimarlık Üzerine On Kitap, 2015, p. 4).

It can be claim that the immaterial architecture, which stands at the point where the matter of architecture and the theoretical and intellectual process are integrated, supports this view and it is the way of perceive physical world of architects and to move their creations beyond the material. Being in search of the shadow here should not be perceived as being limited to a theory. Instead, it should be regarded as the questions asked to ascribe a meaning to the future creations of architects. Then, architecture can be seen as a creative action reinforced with theories. In such view, the creations are neither ideas nor material manifestations; they are what the immaterial tectonic expression created.

Thinking of architecture as creating from matters and physical conditions would resemble the views claiming that the matters have derived from materials, which is the most primitive way of thinking in philosophy. Progressing toward Platonist views, the creation of conditions that can be intellectually perceived gives us superior manifestations. When we grasp an essence, we grasp a form and we do so not via our senses, but we abstract it via our intellect. While our senses are able to process physical things, our intellects are able to process or grasp forms which are immaterial and thus this process of abstraction via our intellect would have to be an immaterial, nonphysical operations. In here, Plato's argument refers to the nature of our intellect is immaterial.

Transferring this argument of Plato to the field of design is obviously influenced by the reshaping of the idea of matter with the translations of work pieces before the reform area in late Medieval age and the development of the ways of immaterial thinking. With the influence of Plato's argument, claiming that Plato claims that all the things we perceive in the material world are modelled on eternal, immaterial, and ideal forms (Timaios, 2015) and only the intellect can comprehend ideal forms, each new creation has started to be discussed within the framework of this view. The Renaissance period was a new term in which the human brain's perhaps the most unique feature could be extensively externalized to see the potentials of people, to realize that they have no boundaries in the fields of art, such as painting, music, literature, and architecture (Şentürk, 2016). Designing has been featured as a creative and intellectual action like drawing the ideas. It can be said that architecture turned into a less-pressurized field from solid ways of creation to solid object production depending on the condition of the immaterial ideas. It turned into a great but a useful challenge for its creator (the architect) because that person now has to face his creation based on the simplest state of thought, and not through any background knowledge.

3.1 Drawing Forth Of An Idea

Before the fifteenth century, artists and architects whose commissions could not be defined exactly could also study associated with manual labor, "painters were sometimes associated with the druggists who prepared their paints, the sculptors with the goldsmiths, and the architects with the masons and carpenters" (Kristeller, 1990, p. 176). Architects worked as an artisan also as a construction supervisor. Since the Italian Renaissance, architects who have more determined their status did not conduct buildings but they possess drawings which were used before as a minor part of a building production. It is possible to say, architectural drawings require more focus on immaterial imagery or mental abstraction.

Tom Porter writes that potential buildings were developed from "architectural forms contained within the library of the existing built environment, using other buildings as full-size models or specimens which could be studied and then modified or refined." by medieval architects like their ancient counterparts (Porter, 1997, p. 10). That means, rather than to generate fully original idea, there were inspiring greatly experimented information. Since architectural drawing was approved as a necessary part of

architecture, architects were more conscious of the visual and liberal creations as a distinct figure who is associated with intellectual rather than manual labor (Hill, 2006). Architectural expression techniques and architectural abstraction have liberated intellect. It has saved human intellect from to be limited to the knowledge of past structures and released unlimited design field. In other words, that the intellectual production can be defined by a consciousness has removed design field's dependence of matter. In addition, the term architecture has reached largely today's context. Modern architecture has started with architectural drawing giving the same suggestion that "Architecture results not from the accumulated knowledge of a team of anonymous craftsmen but from the individual artistic creation of an architect in command of drawing who conceives a building as a whole at a remove from construction." (Hill, 2006, p. 33).

Now, there is no accumulated knowledge obtained from the surrounding physical conditions. The architect is now alone with his ideas and will experience the means of creation by drawing his ideas. In this regard, the theoretical place of design and immaterial expression on creations has started to become clear. Before something becomes concrete, it comes into existence with a flawless system, in an ideal and immaterial way, first in mind of architect and then his/her expression. Thereby, the creations are not derived from the matter, but derived from the superior and an exact expressions. The architect saves his/her creation from simplification as well as he/she creates the world of ideas by moving away from the knowledge of physical existence conditions. It can be said that architectural drawing is not only a method of production and the abstraction of thinking, but also architect's attempt to make ideal, immaterial and perfect his/her own position and production.

3.2 Designing As An Intellectual Process

Architectural drawing has brought a new meaning to the process of production of an architectural work and the content of architecture thanks to Italian Renaissance to a large extent. In this process, it could be mentioned exactly what is called design anymore. "The term design comes from the Italian 'disegno' meaning drawing, suggesting both the drawing of a line on paper and the drawing forth of an idea." (Hill, 2006, p. 33). Italian Renaissance propose that an idea should be conceived and drawn before built. Even, in the middle of the sixteenth century, to build is not considered

only the artistic imagination “but also the capacity for artistic imagination with the expression ‘idea’, so that the term approximated the word *immaginazione*.” (Panofsky, 1968, p.62).

Stressing the supremacy of the intellect, *disegno* is relevant with the idea of architecture not the matter of building. Leon Battista Alberti states that “It is quite possible to project whole forms in the mind without recourse to the material.” (On the Art of Building in Ten Books, 1988, p. 7). It created a thought that ideas are superior to matter. Jonathan Hill support this idea by saying that “Sometimes, a building is not the best means to explore architectural ideas. Consequently, architects, especially famous ones, tend to talk, write and draw a lot as well as build.” (Hill, 2006, p. 37). He mentions Serlio and Andrea Palladio as early exponents, Le Corbusier and Rem Koolhaas as more recent ones. Accordingly, rise of the architectural publications influenced the architect’s experience and understanding of buildings. Carpo writes:

“Medieval master masons (builder) imitated buildings that they had only heard about. In order to see his model with his eyes, the medieval master mason necessarily had to visit the original site. For the Renaissance architect, it was often enough to visit the bookseller on the corner of his street.... For many Renaissance architects, the Pantheon and the Colosseum were not spaced in Rome. They were spaces in books.” (Architecture in the Age of Printing: Orality, Typography and Printed, 2001, pp. 41-46).

It is understandable that the architectural creation process is now in a clear distinction into two as the architectural design and building production. This process is developed, either individually or collectively, by the architectural research and expression process as drawing, writing, and building. And the relationship between them is multi-directional. A drawing can lead to a building, a text may result in a painting, or can be built for writing. Indeed, when we look at the history of architecture we see that searching for the borders of architecture, questioning, and testing came out with drawing and writing as well as with raising a building. This actually shows how architecture has turned into an intellectual process. Contemporary architects follow this process, as well. Words and illustrations are more unlimited than the physical designs, and they can be the intersection points of the immaterial ideas in their process of turning into the material. Wigley says the following on this topic;

“Paper . . . occupies a liminal space between the material and the immaterial. This allows it to act as a bridge across the classical divide between material and idea. Drawings are seen as a unique form of access to the thoughts of the people that make them. Indeed, they are simply

treated as thoughts. It is as if the materiality of the medium is transformed by the quasi-immateriality of the support rather than simply exposed by it. A certain way of looking at paper, or rather a certain blindness to it, allows physical marks to assume the status of immaterial ideas” (Paper, Scissors, Blur, 1999, p. 11).

As a conclusion, in the term of *disegno* the concept of ‘ideas are superior to matter’ is latent. Plato’s theory whose Italian Renaissance was inspired greatly is an influential to develop this concept. He implies the relationship between an idea and a thing. The establishment of this relationship is the way ideas get shaped as coming into existence as “things” that are born from the superior, and creating from the beginning. This also indicates that creator (architects, artists) do not need materials in order to generate. In relation to that, Leon Battista Alberti states “It is quite possible to project whole forms in the mind without recourse to the material” (Alberti, 1988, p. 7). It can be summarised all these discourse with Adrian Forty’s statement:

“The pervasiveness of ‘design’ is to do with the polarities it set up: ‘design’ provided a means of creating opposition between ‘building’ and all that implied on the one hand, and everything in architecture that was non-material on the other hand...In other words ‘design’ concerns what is not construction” (Forty, 2000, p. 137).

3.3 Forming As A Means Of Expression

The term "form" has two different meanings in architectural discourse. Forty writes “There is in ‘form’ an inherent ambiguity, between its meaning ‘shape’ on the one hand, and on the other ‘idea’ or essence: one describes the property of things as they are known to the senses, the other as they are known to the mind.” (Words and Buildings: A Vocabulary of Modern Architecture, 2000, p. 149). Here, the duality is resolved at the point where the immaterial architecture stands. Hence, the sensible state of form will be formed by intellectual states. Platon's assumption that the ideas are synonymous with geometric forms and his statement "straight lines and circles, and the plane or solid figures which are formed out of them by rulers and measurers of lathes and the – turn angles" (Philebus, 1975, p. 51), for example, is again a case where these two meanings are integrated. The purity of a geometrical shape depends on the purity of thought. For example, in early 20th century, Le Corbusier mentions of the beauty of the primary forms we see in light, in his experiences of purism in art and architecture and in his Neo-Platonist statements (Corbusier, 1927, s. 31).

As mentioned by the priest, Marsilio Ficino in the greatest openings of the Neo-Platonist school:

"Now, let's talk about this stone. Do you see it? An ill-shaped piece of a stone, it does not represent anything. Still, there is an idea, a form trapped inside it. It just needs a sculptor to remove out what is unnecessary slowly and consciously; then, this stone would come into being as an extraordinary statue, that is, it would come out as a free being. So, my friends, we draw or shape with our mind, not with our hands." (Cündioğlu, 2012, p. 55)

And in this way, we can discuss the idea and concept not as an abstract thing, but through references that are accessible to everybody. The creator (the artist, architect) understands the world in a manner and can describe it to the extent it envisages. Mind brings quality to the creation. A direct relation can be established with the question, which intellectual problems occupy the mind of each creator.

Converting ideas into physical situations, i.e., forming, is the exact point where the immaterial production stands. Here, the creation process completely starts with an intellectual and immaterial process. It can be said that there are different essences for each designer in this process. If it were not so, there would not be so diverse design fields or so many unique creations in each of these fields. Originality is actually satisfied with the essences that are formed in the mind of each individual. Immaterial creations are the results of the creative world of the ones seeking for the reality, aiming to reach a pure quality, and who know that they can find these not in the physical environment but in intellectual approaches. That's why the materials to make that creation known are just mediators; they go beyond the simple meanings, and they change and transform.

As an example, 'White on White' which is one of the well-known example of Kazimir Malevich's works is apparently simple oil-on-canvas painting consisting of just a white square with an angle. It was initially marked the limits of visual art. However, contemporary artists examined as a new context the implication of their radical decision (Rose, 1965). Malevich's decisions about painting have been stated in his book 'The Non-Objective World' in 1959. According to him there were no more likenesses of reality, no idealistic images but it was filled with the spirit of non-objective sensation which pervades everything (Malevich, 1959). Therefore he describes his most known composition 'Black Square on White' (1913) as the 'zero degree' of painting that is the total abandonment of representation (Meyer, 2010). In

the essence, Malevich's minimal forms were created by his intellectual norms which are, beyond the formal concerns, to "search for the transcendent, universal, absolute" (Rose, 1965). In Malevich's writing 'God is Not Cast Down' (1920) his explanation; "that nothingness was God. . . . God exists as nothingness as non-objectivity" supports this remark. So, what he takes as an example from the transcendent is the concept of nothingness. He reaches transcendental manifestations by getting closer to nothingness. That he searched for nothingness can be seen in 'White on White' in which it is hard to perceive white color on white canvas and he reached the peak of painting art by its immaterial expressions (Figure 3.1).

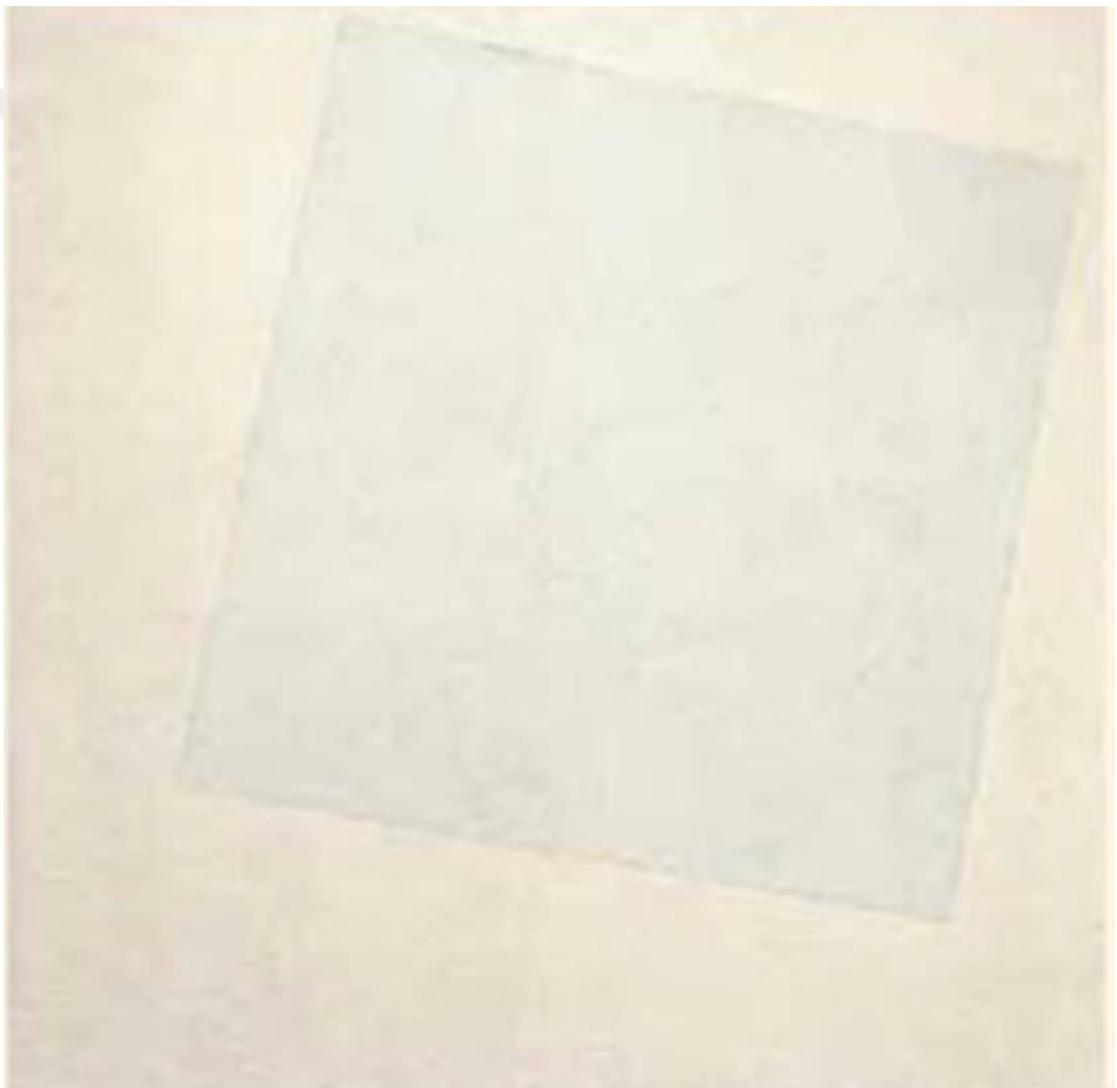


Figure 3.1: Kazimir Malevich, White on White, oil on canvas, The Museum of Modern Art, New York, 1918, (Heckert, 2015, p. 66).

As another example, we can talk about John Cage's music, where the traditional components are eliminated from the creation and where the creator of the future creation will come out in a different meaning. John Cage eliminates traditional instruments, notation, and composition from his music. He deals with composition as an experimental action. In his lecture, he defines 'Composition as Process Part II: Indeterminacy', he criticizes that conductor beats time so as to unify performance and sounds should be arisen from actions' own centers without considering space and time (1961). He says that "It is indeed astonishing that music as an art has kept performing musicians so consistently beating time together like so many horseback riders huddled together on one horse" (Composition as Process Part 2: Indeterminacy, 1961). He suggests a variety of a performance rather than working as a mechanical system. According to him, composition is indeterminate with respect to its performance therefore, it is unique and cannot be repeated (1961). His music made from temporary thing's sounds complete uncertainty was overtaken. His most known piece, 4'33", he created a 'silence' that focused attention on the music of incidental sounds in a performance environment (Figure 3.2). It just "required the composer to sit in front of the piano for the allotted time without striking a chord, dashing the audience's expectation of a well-wrought work; instead, the restless movements, coughs and whispers of the listeners became the work's focus." (Meyer, 2010). Here, music is the joint composition of the composer, audience, and space. When he made 0'00" he did not use even one note. In his concert, he had vegetables which he cut up, then he put the cut-up vegetables into a blender, made juice, and then he drinks the juice in this composition (Fetterman, 2010). Thereby his performance is emptied of feeling and illusion. Michael Nyman called this situation experimental music that brings radical shift in the methods and functions of notation, the specialized symbols we call musical notation may no longer represent sounds (Nyman, 1999). As we can understand, the immaterial doesn't mean "not using any instrument" here, but the change and transformation of the sounds creating the music. It is the point which goes beyond a simple sense and leads to the discovery of new meanings.

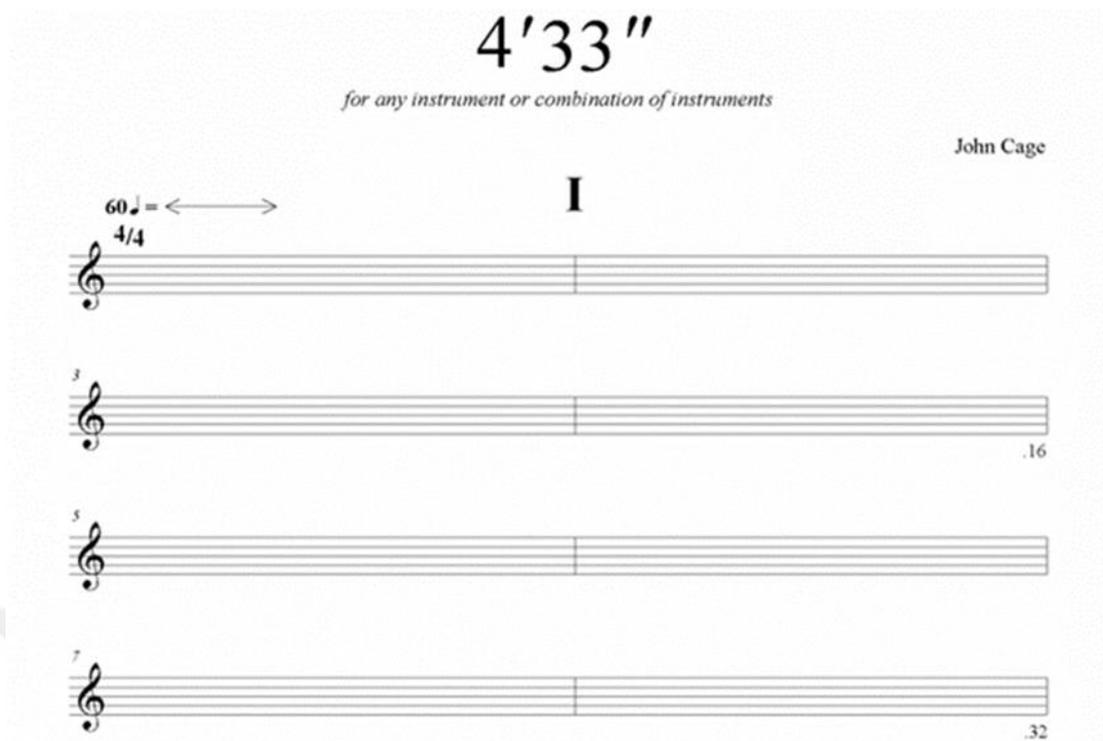


Figure 3.2: John Cage, 4' 33" (Url 1).

Donald Judd, is another example who tries to discover transcendent meaning to matter related with the essence. For him, there is main theme, an essence he calls as the "specific object". That's why this object is "less neutral, less containers, more defined, not undeniable, and unavoidable" (Judd, *Specific Objects*, 1965). In order to produce definite qualities, particular forms are used in his works. He aims to eliminate metaphor and make them as lucid and specific as fully objective unity. He emphasizes the physical and perceptual qualities specific to materials. In his sample in Chinati Foundation, he puts 100 rectangular aluminum boxes in this space which used to be a barrak. In this space, boxes and the floor create reflections when it receives light from its two sides with long and continuous windows. As the space contains the boxes, the boxes get to contain the space, too (Figure 3.3). At this space, where the creation and space are intertwined, the perception of matter has gone out of its simple meaning and seeks for other perceptions. The case here is not an illusion or a visual complexity. On the contrary, he defends to think iconically and to focus on ideas about things with direct observation which make to see an artwork clearly. He says that "it isn't necessary for a work to have a lot of things to look at, to compare, to analyze one by one, to contemplate. The things as a whole, its quality as a whole, is what is interesting, the

main things are alone and are more intense, clear and powerful.” (Judd, *Specific Objects*, 1965).

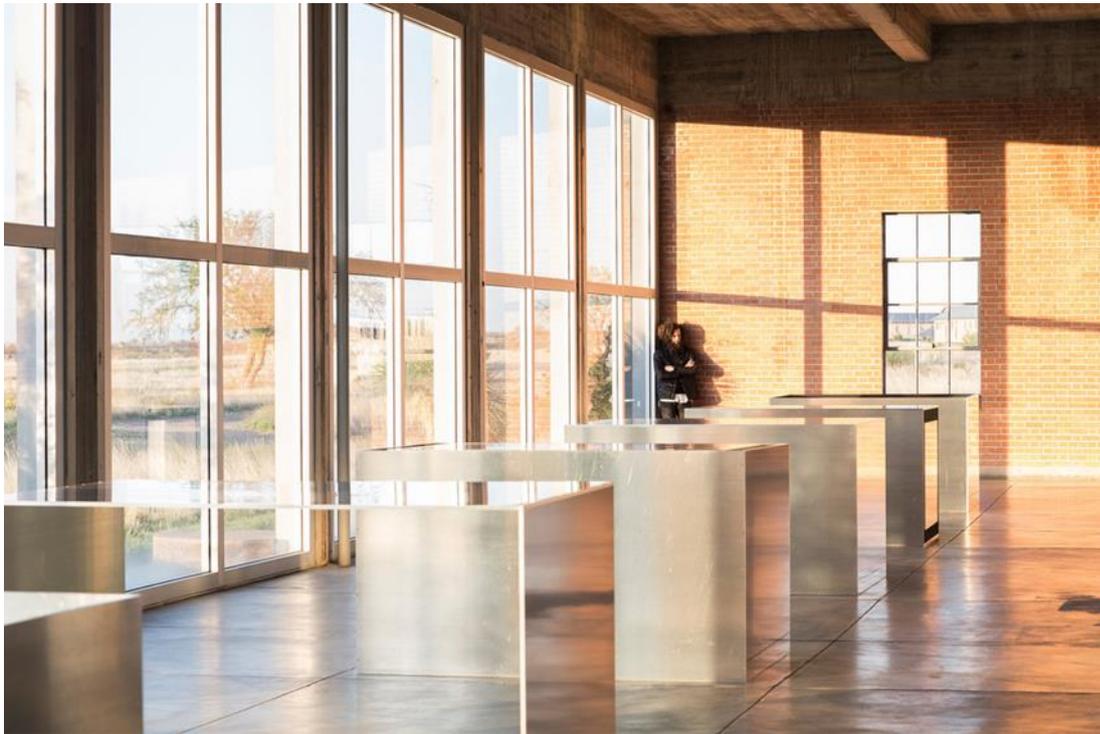


Figure 3.3: Donald Judd's untitled work, Chinati Foundation in Marfa, (Url 2).

In 1997 Fred Sandback installed *Sculpture* in DIA Center. This statue consists of numerous walls spaced in various angles independent of each other and of the space. These walls consist of frames made out of strings, which is unusual (Figure 3.4). Is a strong physical existence really necessary to call it a wall? Even without mass, the idea of the wall has come to be known through those strings. Its space is predetermined for being a wall but the concept of the wall is never defined. The wall, already, must be a non-being in reality. The mind can produce an infinite number of perceptions for this kind of existence.

There is something we need to see here. In fact, all these creations cannot be explained by their formal features. Their expressions gain meaning in intellectual profundity. Therefore, it is necessary to know, or at least, to understand their intellectual background. The cases where such immaterialism is perceived can be clearly recognized in the examples above. That's why these situations are the intellectual interests of some breadth and variety beyond the forms. When evaluating such kind of creations with their appearances or their visible features, explanations always remain insufficient.



Figure 3.4: Fred Sandback, sculpture, Dia, Chelsea, 1998 (Url 3).

Bruce Glaser questioned to Donald Judd and Frank Stella that “Some would claim that the visual effect is minimal, that you are just giving us one color or a symmetrical grouping of lines. A nineteenth century landscape painting would presumably offer more pleasure, simply because it’s more complicated.” (Questions to Stella and Judd, 1966). For both Judd and Glaser were not thinking it is more complicated. Frank Stella’s answer was that nineteenth century works had got only deep space and the way it is painted which are made painting seen how it’s done and read that figures in the space. He wanted the feeling to be painting people cannot avoid the fact that it is supposed to be entirely visual (Figure 3.5). Judd answered that “If my work is reductionist it is because it does not have the elements that people thought should be there.” (Glaser, 1966). In fact, it is a way of getting rid of habits. It is the creating, forming of the invisible, not the visible.



Figure 3.5: Frank Stella, *Die Fahne Hoch!*, enamel on canvas, Whitney Museum of American Art, New York, 1959 (Meyer, 2010, p. 48).

However, this situation created will certainly not remain as a feat of ideation. It must become sufficient to be something else, as well. Ideas will not remain solely as ideas but will be followed by feeling, discovering, and making inferences. This will be provided with the sensibility of the reserved impersonality of the creation. Only an anonymity prioritizing the creation will be in issue then. This is not only about the change and transformation of materials but it is as if it had recovered from the identity of the creator and existed itself. The creator has a minimum degree of self-expression, whereas the creation's experiences involve the new and unexpected. According to

Allen Leepa trying to get to the very nature of the experience ‘clarity of idea, precision of means, standardization of elements, and impersonality of statement’ are the essential aspects of it (Minimal Art and Primary Meanings , 1968).

In fact, one of the foremost features of a creation can be said to be its meaning. Comprehension, or caring about the essence requires keeping the physical aspect at a minimum level. Here, the situation perceived to be easy, simple, or plain hides the complexity of its intellectual structure, indeed. This challenges the beholder to experience a layered and complex aesthetic response; however, it will produce some kind of inquiries, which will lead to the enrichment of its intrinsic world. In this respect, the immaterial refers to the realm of ideas. It may not directly say, like Plato, matter is modelled on ideal forms, but it is appropriate to mention situations in which the immaterial is associated with the intellectual. In these situations, the thought that the ideas are superior to the materials is emphasized. Such that, the creation comes into being not as the material we know to be the correct expression for reflecting an idea, but as a completely different sensation shaped by an idea.



4. IMMATERIAL ARCHITECTURE

Architectural creations are primarily considered through their physical state and solidness, stableness and safety conditions. As these conditions are directly associated with the matter in general, it requires architecture to be considered on the basis of the matter. This is why the profession of architecture has always felt the pressure to derive from the solid matter, to be a solid practice. However, even in the discussion on what the starting point for architecture is, we see a situation which does not directly create a form of material situation, but an interior space where the outer stays out, a situation where the human isolates himself and his life. What architecture describes is a defined space which creates its own atmosphere in the infinite space. When material and structural features are questioned, it is started to discuss its qualifications of the essence with the conditions of its existence. Thus, in this debate the response of discussion of space is structured tectonic expressions that are the conceptual counterpart of man's conscious, transformative actions towards matter.

Where we do not regard architecture as a solid profession creating solid situations, if we consider that architecture is inspired by the aforementioned intellectual process and that is inspired by the more transcendental qualities, like the creations of the God, we can say that the creative act of architecture is tectonic. As an origin in Greek, the word tectonic derives from the word "tekton," meaning builder or carpenter. And it alludes to the art of construction in general. As an origin in Greek, tectonic derives from the word "tekton," meaning builder or carpenter and it alludes to the art of construction in general (Frampton, 1995, p. 3). In this poetic connotation of the term "tekton," the carpenter assumes the role of the poet. Over time, the meaning of this term has changed. Then the role of "tekton" led to the emergence of "architekton," meaning master builder (Frampton, 1995). According to Adolf Heinrich Borbein (in his 1982 philological study) tectonic becomes the art of joining that tends construction or making of an artisanal or artistic product that can be building or object (Frampton, 1995). As it means creating or building a tectonic product and bears such poetic

meaning, it can be said that tectonic is based on application of the ideas and judgment over production

This is a tectonic, visual thing with a scene in architecture as well as the poetic feature of the term. Just like in Aristotelian and Kantian philosophies, this scene is inspired by the term 'architectonique' (Lefebvre, 2014), which is in a scientific relationship with individual or groups of information belonging to a certain system order. The components forming this scene are the subject, method, and matter of architecture, and there is interdependence among those. The concept of space, which is expressed as the essence of modern architecture by Semper, can be considered as the subject of architecture. Space is generally considered as the extension of the body in modern architecture. Talking about the concept of space, not as a mass but as a relation, creates an immaterial sensation. Matter of the architecture can be considered as a reality of material which is often over-thought. In Renaissance, buildings were more related to the form, less related to the matter presented by the ideas. But then the classical view that says the form is independent from the material, has lost its validity. It was begun to investigate qualities of materials and how to quantify the qualities of materials. The method of architecture is very diverse, in fact. It can even present a new method for the relationship it will build with the space and the matter for each structure. It can be said that the method is related with considerations of tectonic qualities or tectonic formation. Architects or creator generate their production in a process. This process is effected by the frame of immaterial thought and design. In here, Semper always develops exemplary methods with his innovative explanations. The 'Bekleidung Theory', which defends that each scene can go beyond the learned methods and generate unique forms, will be a good example of this.

4.1 Space As A Subject Of Architecture

"Manipulation of space," which is one of the important concepts of modern architecture, leads the practices (views and research) and productions of the architects to the same point, being an immaterial and intellectual approach to space. Because this is the most comprehensive and effective concept of space to obtain information about and understand the true nature of the physical universe. It involves a process like discovery, organization, and creation. Each spatial existence is the result of an intellectual process and the material combination of the elements producing that.

Since Semper, who regards the space as the basic theme of modern architecture, we have known that architecture did not arise from a solid and protective idea of a house but from the idea of enclosure. It must be such that the beginning of building coincides with the beginning of textile (Semper, 2004). Semper claims that woven fabrics were used before the building of strong walls for protection:

“For it remains certain that the use of the crude weaving . . . as a means to make the ‘home’, the inner life separated from the outer life, and as the formal creation of the idea of space – undoubtedly preceded the wall . . . The structure that served to support, to secure, to carry this spatial enclosure was a requirement that had nothing directly to do with space and the division of space” (Style in the Technical and Tectonic Arts, Or, Practical Aesthetics, 2004, p. 254).

Claiming the first architectural movement to be arising from the idea to create an interior space and to provide this with a small amount of material surface, would certainly mean linking architecture with the immaterial.

In contemporary architecture, as claimed by Herzog & De Meuron in conformity with this view, which gets practice and its product to the same point, "the immaterial, mental processes of understanding, learning, and developing always have priority." (Zaera, Interview With Jacques Herzog; Continuities, 2005, p. 17). Though they emphasize thousands of concrete experiences of materials, the material is a mean, indeed. An example of that is the Eberswalde Polytechnic Library, which has gone beyond its primary qualities, such as the soundness and protection of materials, in the creation of an interior life. The pictures chosen from the German history are creating a band on a horizontal row on the surface of the library (Figure 4.1). These pictures, taken from old newspapers, which are iconic images for the people of Eberswalde, are actually black and white. But when applied to concrete and glass surfaces, they become less contrast and less defined. The images behind the glass surfaces and the ones on the surface get mixed, and the viewer confuses which one is real and which one is the representation. The building and people seem to be stuck between the material and the immaterial. Actually, in their works, Herzog & De Meuron wish to establish a one-to-one relationship between the work-piece and the viewer; according to them, in fact, this is the only chance for architecture to survive (Zaera, 2005). Materials are the small effects that initiate these events, or the means that are used to be understood.



Figure 4.1: Herzog & De Meuron, Eberswalde technical school library, Eberswalde, Germany, project 1994-1996, realization 1997-1999 (Url 4).

For many early modernist architects, space is defined as the essence of architecture. But unlike Semper, there are those who define space as a space-time continuum (the four-dimensional continuum, having three spatial coordinates and one temporal coordinate, in which all physical quantities may be located), not as an enclosure. For example, Moholy-Nagy makes such claim on architecture in 1928 in the Bauhaus publication, *Von Material zu Architektur* (The New Vision: From Material to Architecture). And in the foreword of the 1947 edition of the same publication, Walter

Gropius writes as "Today we are confronted by new problems, eg, the fourth dimension and the simultaneity of events, ideas inherent in a modern conception of space." (Preface, p. 6). Moholy-Nagy's sense of space is primarily based on the developments in art and physics in the 20th century. Cubists who questioned the notion of a planar perspective at that time, regarded space as the relationship of our experiences, which are not limited to a moment, but accumulated over the course of time, and mentioned of the integration of temporal and spatial factors (Rowe & Slutzky, 2012).

"In 1912, a Parisian painter said: I portray an object, for example a box or a table, from a single point of view. But if I take the box in my hand and turn it around or if I turn around the table myself, my point of view will change. So, when describing the object from every new point of view, I will have to provide a new perspective accordingly. Thus, the reality of the object is no longer described through a three-dimensional depiction based on perspective. In order to have it all, I must draw an infinite number of perspectives from the point of infinity" (Zevi, 2015, p. 18).

The viewpoint got adapted to time and changed place one after another, which brought the fourth dimension, that is, the temporal dimension, to the three known dimensions. It is the audience itself who moves within the structure from a different viewpoint and creates this fourth dimension, indeed. And by doing so, he gives the space its whole reality.

Moholy -Nagy is also influenced by these thoughts, yet he does not think of space as an independent entity. "A definition of space which may at least be taken as a point of departure is found in physics; space is the relation between the position of bodies" (Moholy-Nagy, 1947, s. 57). Here the body is a necessity only. The main issue is the inter-spatial relationship. "Space creation becomes the nexus of spatial entities, not building materials. Building material is an auxiliary, just so far can it be used as medium of space-creating relations. The principal means of creation is the space itself." (Moholy-Nagy, 1947, s. 141)).

Whereas Semper refers to space as an enclosure, Moholy-Nagy refers to it as a continuum and extension of the body. He claims that the user can adjust his spatial experiences with movements. The creation of the space is associated with the architect. But the creation and experience of space can be one. "The dance is an elemental means for realization of space-creative impulses. It can articulate space, order it." (Moholy-Nagy, 1947, s. 57). Moholy-Nagy here takes the space as something within the body

that is in a dynamic relationship with the other spatial forces. Such an understanding has the immaterial instead of abstractions in its experiences. Being different from Lefebvre's view of space as something produced by the user, or many architects' view of it as something that can be done by the architect, he speaks of the spatial creativity of the architect and the user.

In modern architecture, it can be taken the church buildings of Tadao Ando as an example to a situation where the user is involved in the creation of space. Of course, he produces his space under the influence of principles with interpretational depth, which is related to the religion. The Church of Light, for example, is built on the theological foundation of the Buddhist idea of 'nothingness'. The space of nothingness, trying to embody the spiritual realm in a defined space, is described through the theological and philosophical concepts of nothingness. The space of nothingness is the place where the individual finds himself and the wealth of life and struggles to reach a deeper layer of self (Baek, 2009). Here, we see a point where the user can direct the space, a point where he also has to discover himself as a space. Maybe the space here becomes the scope not of the act of dance as in the example given by Moholy-Nagy, but the act of praying, the moment of encountering the God. There is nothing to make infinite space a defined space, other than the deep awakenings that come into being themselves. Other spatial forces just remain as the elements that are beyond the sensational qualities, which serve as means for all these discoveries. Maybe at this point it would be necessary to talk about how the concrete was used in a creative way. However, the space is already at a point where it has already got eliminated from the artistic, engineering, and technical discussion and where the material has turned into a feeling. About this, Ando wrote in "Light, Shadow and Form" that in his architecture, "the actual walls cease to exist, and the body (shintai) of the beholder is aware only of the surrounding space." (1996, p.458).

But if one will talk about a situation in between the presence and absence of all those different directions of the light drawn by the cross, it can be explained by the fact that in Eastern culture, unlike the Western, it is the focus point of not the "things" but the spaces in between the "things." In an interview with Jin Baek, Tadao Ando describes this as follows:

“While in Western painting the colored parts are more important, in Japanese calligraphy yohaku, or emptiness, is more important. When we perceive the cross in the Church of the

Light, we should remind ourselves of this. The cross is visible, and yet invisible. The cross alters itself with the passage of time, demanding from the perceiver at each moment a different emotional, intellectual and spiritual response. It is not a conventional symbol. It creates various shapes of imprints upon the otherwise dark emptiness, as well upon the surfaces of the walls. This cross is not analyzed, but felt by shintai². Ma³ is this feeling of shintai in what is behind the visible.” (Baek, 2009, p. 196).

Meanwhile , the cross charges the daylight, which is just a sensation, with spirituality and turns the feeling into a state which has emotional significance. And it does this with the in-between state of visible and invisible (Figure 4.2).

In the scope of this study, the idea of space should not be confused with the concept of abstract space. While this concept actually emerged in early 20th century as the "autonomy of art," it basically served consumption and thus, remained as an approach forcedly related with the intellectual, which is not so productive, indeed (Bürger, 1985). Space is clearly presented to the user with an abstract schema explicitly, and hence, this approach rejects the production of space by experiencing. However, immaterial architecture does not involve some sort of formalist approaches, under the name of independence of everything and autonomy, which has no intellectual limits. It has its borders from its way of viewing or interpreting the world. It is far from approaches destroying the space with few qualities.

On the other hand, it resembles the idea of space which is at the endpoint of the formalist abstraction created by the metaphysical philosophy. This philosophy reveals out the space, the essential space ‘in itself’ and Spinoza has accepted this absolute space as an attribute of the absolute being – the God - or its state of being (Lefebvre, 2014). A space ‘in itself’ is described with an infinite, universal meaning which has no borders and which does not need anything in order to exist. Many philosophers have easily adopted this idea of space together with all the things it is assumed to contain, that is, together with the figures, relations, ratios, and numbers. But Leibniz

² Shintai, (Japanese: “god-body”), in the Shintō religion of Japan, manifestation of the deity (kami), its symbol, or an object of worship in which it resides; also referred to as mitama-shiro (“the material object in which the divine soul resides”). The shintai may be a natural object in which the divinity’s presence was discovered, such as a stone, mountain, or well, or an object made for him, such as a sword, comb, or mirror. (<https://www.britannica.com/topic/shintai>).

³ ma; goddess (<https://www.britannica.com/search?query=Ma>)



Figure 4.2: Tadao Ando, Church of the Light, Osaka, Japan, 1999 (Url 5).

suggests that space is in itself, and in this state, space is not ‘nothing’, so he says that it is necessary to occupy a place in order for it to become a distinctive space and the body occupies it. The body, here, is the body which fills space and directs the space with directions and which determines the direction and the backward rotation of a movement. According to Leibniz, the space is relative, and in terms of mathematics, with a perfect abstraction that makes space initial and tangible quality (Lefebvre,

2014). Its original quality easily makes it transcendently visible; whereas its material quality is the thing where the bodies come into being and display their materials. This is the point where space starts to be defined, while the absolute space is a representation.

Lefebvre summarizes his understanding of space as follows; the first is the physical area (the nature, universe), the second is the intellectual area (abstractions) and the third is the social area (Lefebvre, 2014). Space is neither an absolutely concrete nor an abstract concept. Beyond its physical being, space is an action, a mean of thought on one hand, and a mean of power and control on the other hand. In immaterial architecture, the manifestation of infinity and timelessness of the universe has its borders. These borders come from the ontological referents of the being. The manifestation of space goes beyond the limits of the act of doing. By certain way of expression, it finds the dimensions beyond the borders of the human consciousness and forces the manifestation capacity of the infinity and timelessness of the universe.

Peter Zumthor's architecture can be a good example of the desire to develop an architecture that determines the real and turns into reality. Zumthor mentions of the "magic of reality" and for him, it is an alchemy which turns into human perceptions and sensations from real matters (Zumthor, 2006). Certain moments are created when the matter, the substance, and form of an architectural space are emotionally applied or internalized accurately. This point of view is the source of his consideration of a space and a context and his formation of the basic ideas or principles to enable the development of the design. That's why his buildings have a strong and eternal existence. For example, a prayer, which makes Bruder Klaus Field Chapel question spirituality and which reminds the visitor to ask existential questions, is the most contemporary form of the space. This place has been eliminated from all material states and reached the spatial spirit called as the 'atmosphere' by Zumthor. Here, material realities are just the mediators while the creations are the mystical feelings. While this leads to the intellectual design mostly, his consideration of the design as a whole comes from his viewing the space together with its matter and method. He himself says that "Construction is the art of making a meaningful whole out of many parts." (Zumthor, 2006, p. 11). It is possible to follow the details of the structural elements in harmony and rhythm without losing the sense of the composition as a whole. This whole makes its details meaningful. It is possible to grasp the rules that govern the structure of a

building, as well. All these basically intend to achieve the space that makes the human being feel an atmosphere. “If a work of architecture consists of forms and contents that combine to create a strong fundamental mood powerful enough to affect us, it may possess the qualities of a work of art.” (Zumthor, 2006, p. 19). In Bruder Klaus Field Chapel, this comes out of a system of thought which creates a spatial area with endless continuum and which makes such spatial area visible through the freely used structural elements (Figure 4.3).

Production of space does not come out as any object or thing, but as a basic requirement of the new architectural state to be created, as a result of the transcendent state sensed in the form of matter and energies. It can also be said that it is something envisaged in itself and for itself. When we reconsider architecture from this perspective in terms of structure, the structure is no more related to the technique but to its expressive potentials. These expressive potentials do not refer to the unusual forms of constructing a building but to the awareness of such situations and understanding of their causes. And here, space does not exist as it is described or fictionalized but as it is experienced. The space is an experiential horizon, and it comes out when and the representational signification of an architectural element is transcended. The corporal, material performance of the elements is integrated into daily life.



Figure 4.3: Peter Zumthor, Bruder Klaus Field Chapel, Cologne, Germany, 2007 (Url6, Url7).

4.2 Beyond The Limits Of Materials

Immaterial architecture cannot be associated with only a mental process of a theory. It is also thinking about materials of architecture. Pallasmaa writes that “The current over-emphasis on the intellectual and conceptual dimensions of architecture contributes to the disappearance of its physical, sensual and embodied essence” and that contemporary architecture needed to intensify material qualities of weight, texture, and time (*The Eyes of the Skin: Architecture and the Senses*, 1996, p. 31). Relating to Pallasmaa’s this opinion, contemporary architects such as Peter Zumthor and Tadao Ando focused on sensory perceptions of material, e.g., tactility, acoustics, etc.

In the Renaissance, architecture as production of an idea was connected to the immaterial. The ideas which are more associated with to generate form than matter. However, Weston remarks that later “The Classical view that forms were independent of matter was no longer tenable, and from the early eighteenth century onwards scientists and engineers began to devote increasing attention to understanding and quantifying properties of materials.” (*Materials, Form and Architecture*, 2003, p. 70). Later on, there was an assumption that certain tectonic language came from the essence of each material in architectural discourse. Semper was an influential name in this discourse: “In the first place, every work of art should reflect in its appearance, as it were, the material as physical matter . . . In this way we may speak of a wood style, a brick style, an ashlar style, and so forth.” (*On Architectural Styles*, 1989, p.269). To give materials positive value and active role, Semper faces traditional philosophical discourses that do not attach importance to matter. Influenced by Semper, Adolf Loos states that “Every material possesses its own language of forms, and none may lay claim for itself to the forms of another material.” (*The Principle of Cladding*, 2008, p. 66). In addition, he thought that architect must be master of material to ensure the unity of the whole design. Creating new form with new ideas was important but it is possible by having a full command of materials. As he said his tectonic expression is to find a new appropriate language to materials (*Mimarlık Üzerine*, 2015). However, Loos’ discourse on the relations between materials and forms is reductive in comparison to that of Semper. Because Semper stresses the transfer of an idea from one material to another. Thus, the paths are opened for the material, leading to other meanings which deviate and transform from their original meaning.

Semper suggests that material and technique play a role in the genesis of art forms, however, it should not be understood all art forms were always the direct product of materials and techniques (Riegl, 1992). For example, modernism summarizes Semper's suggestion in the phrase 'truth to materials'. Here, the material speaks and the architect responds, as in Louis Khan's remark "When you are designing in brick, you must ask brick what it wants or what it can do" (Wurman, 1986, p. 152). And now, in a similar way but with a broader approach to the original meaning of the material, Peter Zumthor says, "I believe that materials can assume a poetic quality in the context of an architectural objects, although only if the architect is able to generate a meaningful situation for them, since materials in themselves are not poetic." (Thinking Architecture, 2006, p. 10). This suggests going beyond the raw meaning of the material and finding new meanings for that.

Suggesting the reality of materials and focusing on the discovery of all its properties, rather than ignoring it, he leads the inquiry of the complementary properties of immateriality. Architects seek for revealing out material properties such as heaviness or opacity and this time, the situation develops together with immaterial properties such as lightness or translucency. Korydon Smith mentions about this as follows:

"Throughout much of architectural history, architects focused on qualities of solidity, permanence, and heaviness. In opposition, new materials have enabled new qualities: Can buildings be more transparent, maybe ghostly or invisible? Can buildings become lighter, maybe able to float? Can buildings be made to move, maybe daily? Exemplified by Diller and Scofidio's "Blur Building" at the 2002 Swiss Expo, where the primary building material was fog, the exploration of "immateriality" in architecture is relatively new." (Introducing Architectural Theory: Debating a Discipline, 2012, p. 107) (Figure 4.4).

Material realities, superior (upper qualified) is located in article tool to reach until the meaning or substance of the essence can be associated with disclosure. For example; the dominant presence of the concrete in a structure can expose the essence of the material. It is clear that the structure is a concrete building but the definition of the material becomes debatable. The idea here is that when a material is defined or when it is being constructed completely from concrete becomes important, there is an architecturally significant moment, an experiential interval. For example, Zumthor's architecture is established with the material and tectonics. His architecture is a careful



Figure 4.4: Diller & Scofidio, Blur Building, for 2002 Swiss Expo, Yverdon-les-Bains, Switzerland (Url 8).

and plain investigation of the space and purpose and it usually occurs through a key material. The presence of a material is highlighted and there is an authority intended for the whole architectural being. It can be said that he emphasizes that a material needs to discover its potential in each project until it grasps the big impact of the building (Figure 4.5). Maybe such relatedness of the process to the material evokes the feeling that all the concerns about physical manifestations have been entirely eliminated, and it helps to experience space with a transcendent image. In relation to that, Zumthor states the following;

“The sense that I try to instill into materials is beyond all rules of composition, and their tangibility, smell, and acoustic qualities are merely elements of the language that we are obligated to use. Sense emerges when I succeed in bringing out the specific meanings of certain materials in my buildings, meanings that can only be perceived in just this way in this one building. If we work towards this goal, we must constantly ask ourselves what the use of a particular material could mean in a specific architectural context. Good answers to these questions can throw new light on both the way in which the material is generally used and its own inherent sensuous qualities.” (Thinking Architecture, 2006, p. 10).



Figure 4.5: Peter Zumthor, Thermal Baths in Vals, Graubünden, Switzerland, 1996 (Url 9).

In Herzog & de Meuron's works, material organizations mean that the structures specified come out as creative elements, without losing their significance. These buildings do not intend to define the events. Materials' other kinds of properties are applied to in order to introduce creativity and understandability for them. This method involves solving the forms of experience and weakening the power of structuring in order to recover the freedom to reorganize the material. So the formalism they question gain importance as the use of figures in established creativity. For example, Dominus designs the Winery as a functional and environmentally sensitive warehouse, winery, and office building. Natural stones stuffed into a wire mesh give a striking look of an angular obelisk. From a distance, the building looks like a mass totally; but when one gets closer, he sees its stone character. So the winds of California are regarded to be a functional system that allows ventilating the wines. The logic here described by Herzog&De Meuron as the following;

“The gabions are filled more or less densely as needed so that parts of the walls are very impenetrable while others allow the passage of light: natural light comes into the rooms during the day and artificial light seeps through the stones at night. You could describe our use of the gabions as kind of stone wickerwork with varying degrees of transparency, more like skin than like traditional masonry.” (Herzog & de Meuron , 1997).

Although this new architectural element is nothing but a wall of stones, it is an exceptional situation where the permeability property of the structure is discovered as well as its feasibility, and where the stone becomes permeable. The tectonic identity and structural expression that architects preferred and specialized, by moving beyond the material qualities of stone, have caused to meet original character (Figure 4.6).

The Rooftop Urban Park Project carried out by Dan Graham in 1991 in DIA Center is another example where the material exceeds beyond its quality. Initially, it indicated Graham's video work, and it was expected to remain for three years. But it was retained with a theme: 'self-perception fragmented in time and space' (Hill, 2006). It consists of a cylinder within a cube both of which walled in two-way mirror glass. This material exhibits both transparencies and displays the forward due to its reflective quality. It overlaps the sliding reflections of the viewer with the view of the city and with other things. It was present varied conditions for each glance during the day and season by the changing character of the sky. This pavilion is a different approach to the modern architecture's common concerns; transparency, spatial penetration, light, physical movement. It considers the perception of the self in relation to others (Figure 4.7).



Figure 4.6: Herzog, Jacques & Pierre de Meuron, Dominus Winery, Yountville, California, USA, realization 1996-1998 (Url 10, Url 11).



Figure 4.7: Dan Graham, Rooftop Urban Park Project, DIA Center, 1991(Url 12).

4.3 Technique Revealing Out The Expressive Potentials

It can be said that in a way immaterial expressions suggests focusing on an idea in search of the superior. According to Semper, “Architectural forms are organic if they arise from a true idea, if in their formation they display the lawfulness and inner spiritual necessity by which nature herself creates only the good and the beautiful and uses the uncomely as a necessary element to harmonize the whole” (Style in the Technical and Tectonic Arts, Or, Practical Aesthetics, 2004, p. 11). Creating the right ideas should not face any constructional problem; it should not be challenged by technical problems on how such thing can come out. In respect to this, Semper mentions of architecture as going beyond the technical problems and seeking for original formations and normal forms (Mallgrave, 2004). From this aspect, architecture does not favor any particular style, it serves to counter present tendency in its tectonic expressions as Frampton said (1995). From an immaterial viewpoint, this is a tendency where the essence of formation is sought. This results in the original manifestations of original ideas. Each new architectural form gains a unique autonomy. It is because ideas bring themselves and their forms into being. They come into being in their own normlessness, without sticking to any constructional technique.

In the book, *Studies in Tectonic Culture* (1995), Frampton defined the mutually interdependent relationship between the order of structure (the inner architectural thinking of a specific architect) and the method of construction (the outer architectural

form) in the art form. Considering these not as things coming one after another but as things staying together would mean that the methods of construction find their own expressive potentials.

For example, there were some methods of construction which had to be followed in architectural periods. It was because technology always has a limit in its development for each period. There are certain rules to keep a building stand on a horizontal surface and these rules are easy to comply with. There are also situations where the construction of the enclosure and the priority of the interior space come to the forefront. This priority explicitly says that the structure going to be found on all of these. Later, considering enclosure and structure apart from each other enables construction technique's expressive potential and immaterial architecture. The difference between the skin that is determined character of the construction and the core of a building rearticulated in the creation of architectural form (Frampton, 1995). Semper's *Bekleidung* theory is the best example of the suggestions that will enable the freedom of the idea that will shape the building, that will recover it from all methods of construction and set it free. This theory mentions of the non-constructive role of the surface of the building surface and enables the manifestation of a building free from the construction methods. In fact, the function of the architecture and the role of architects are explicitly revealed out here. Now architecture will form a free creation area and the architect, with a free way of thinking, will start creating from the beginning. Such approaches are important to make immaterial tectonic expression possible.

Mallgrave explains this idea translating 'Bekleidung' as 'dressing or clothing' (Mallgrave, 2004, p. 50). He mentions that *Bekleidung* is generally translated as cladding but it leads to misunderstanding because *Bekleidung* theory "used the attributes of mass only to emphasize precisely the activity and life of the organic members. In short, it emancipated form from the material and from naked need." (Semper, 2004, p. 379). Semper promotes architects' abstract capacity to create space (Frampton, 1995). It emphasizes the volumetric quality to be experienced. The thing to shape the tectonic expression will not be related to the enclosure of the building but to the creation of space.

Le Corbusier's tectonic expression is like an example of Semper's theories. Le Corbusier proposed a housing scheme that insist of floor slabs, piers for vertical support and stairs. The subdivision of the interior and enclosure of the exterior were left to the preferences of the builders (Moffett, Fazio, & Wodehouse, 2003). Le Corbusier's Free Plan relates to the immaterial when establishing the relationship in the concepts of the method, material, and space. Because its load-bearing frame leaves the material to be used and the spaces to be created to the architect's preference completely.

Le Corbusier's tectonic expression was specified with the five point by himself; the column, the roof garden, the free plan, the ribbon window, the free façade. Le Corbusier used uninterrupted floor slab to promote his free plan that is the function to flexible use. This usage required flexible façade in order not to identify interior movement. He used industrial windows to fill horizontal openings extending continuously with little regard for the location of interior partitions. Cantilevered floor frees the façade from constructional elements. Façade no longer means to wall but it is a canvas for aesthetic treatment (Hebly, 2008).

Villa Savoye is one of the most celebrated work of Le Corbusier is an example to observe immaterial tectonic expression of him. The first floor slab was elevated by the pilotis and it defined open ground level. Thanks to this flexibility which was provided by load bearing frame the curving ground floor wall is determined according to turning radius of car. Indeed, this house is more complex than this simple exterior skin. He avoided having interior partitions between the columns. He used light glass partition walls to separate living rooms (Figure 4.8).

With the freedom allowed by the construction method, a building creating its own space was formed; the concept of a wall was changed and so was the material corresponding to the concept of the wall. The elements to set up the interior space and the relation set by the interior space with the exterior got immaterialized.

Semper's theory forms the ground for the immaterial tectonic expression as a method because he suggests that the structure and enclosure are separated from each other. However, Adolf Loos claims in *The Principle of Cladding* that enclosing, cladding a building comes before all other problems because people care about how to get



Figure 4.8: Le Corbusier, Villa Savoye, Poissy, France, 1929 (Url 13, Url 14).

protected from the environmental conditions first of all (2008). Structural frame, for him, is the thing the architect needs to think over secondarily. Loos claims that architecture has arisen from the need for accommodation. People want to protect themselves. That's why the architect's first responsibility is to provide a warm, livable space. Carpets are warm and livable, the frame is only there to keep the carpets (Loos, *The Principle of Cladding*, 2008). That's why he founds his designs on the necessity and significance of the material to clad the building. Ascribing a meaning to a place can only be achieved through materials and by forming them (the carpets). So the

material is the founding element of space. It makes use of the material's own richness and this use is so intense that the relationship between cladding and space turns into the relationship between material-space (Beek, 2008) due to this material viewpoint. In the meantime, the material still does not have any newly-found meaning it has created itself other than its first, visible state. There is neither a state where the material changes and transforms. The value he gave to the material made him a material designer. As he says, architecture is seeking to give new forms to the material. Maybe his use of the material in its simple form and his valuing the beauty of the naked material made him a minimalist architect, away from ornaments. However, as he only saw the first meaning of the material, he didn't become an immaterialist. Loos asks, "What does an architect actually do? He uses materials and evokes feelings in us, which are not inherent in the nature of such material" (Mimarlık Üzerine, 2015). But, its immaterial meaning was not the thing that he questioned.

In a totally different view from Le Corbusier's free plan, the method of spatial composition, developed by Loos, is the Raumplan based on the 'container concept' (Beek, 2008). He assumes a house as a three-dimensional object. Therefore, there are rather hard movements in the horizontal and also, in the vertical. Living spaces are defined with layered floor tiles. Unlike Le Corbusier's view, the spaces have borders here, and the use of space is not decided freely. The surfaces of the building are designed by considering the privacy. Whereas the relationship of the interiors is at maximum level, the relationship between the interior and the exterior is not well designed. In other words, compact living is packed into a simple basic cube.

In Loos's buildings, exterior walls and partition walls are load bearing in parts. The supporting construction is necessity which does not play an architectonic role in his work. Therefore; they neither have a state like Le Corbusier's, that are put stable, which then frees the remaining design; nor they could turn into an element that managed to get integrated into the creativity of the architect, which was re-designed together with the building. Framing elements such as columns, pilasters, and beams identify spaces apart from walls as partitions. Piers, beams, and joists that are filled with panels is a complete frame system. The frame is dominant enclosing the space like a cage.

Mies Van der Rohe's Farnsworth house is another good example of a structure, where the material and space have melted by the construction method and reached an immaterial tectonic expression. All data belonging to the house and nature became

intertwined; the concept of a wall, for example, came out as nature itself. In a special continuity, it creates a feeling that it has defined only a piece of the universe. It mostly ensures that by making the house transparent. But then, we understand that transparency of the material is something beyond a material phenomenon (Figure 4.9).

Transparency, which is a physical property of glass, here gains a meaning like "the indefinite." This related to more advanced levels of interpretation, as defined in Gyorgy Kepes's *Language of Vision*:

"Transparency is more than being just a visual property, it involves a broader spatial order. Transparency is the concurrent perception of different spatial locations. Space not only withdraws but also fluctuates in a continuous activity. Locations of transparent figures have a double meaning as each figure is seen as the one closer and the one further." (1944, p. 78)

Here we can talk about a view's passing through a structure and its discovering the meaning. Just as Rosalind Krauss' implication on 'phenomenal transparency', it is an abstract object property which is 'a function of the viewer's organization and thinking capacity' (2012). Large glass facades become the stimulator, encourager of certain intellectual depictions; this is the creation of a transcendent object. It converts a physical reality about the structure. It reveals out the fact that; they exist in a three-dimensional space and are experienced in a temporal manner.

Let's consider all the materials, spaces and formations, which are seen as the properties integrated into the inherent structure of a complete object, through Eisenman's House 2 (Figure 4.10). The process within its structure, which is built step by step over time, do not make references to the traditional reasoning; it turns the structure into perceptual data, making the reality behind, visible. The thing called as System 2, is based on a geometric logic that is marked and has become visible. So in this structure, the phenomenon surrounding us seems reducible; still, this simple basic order cannot be physically experienced. Krauss explains this as follows:

"System 2 refers to a conceptual house, for three reasons: the first one is that the house is a virtual object that exists in the mind rather than in reality. The second reason is that the house exists as the symbol of several laws bringing it together; from hypothesis to the result, with pre-defined rules, and an inductive nature, a house that is reached through an inductive process which could be called as conceptual. And third, this structure progresses by presenting the types of architecture through several normative expressions. For instance, when we ask what the nature of a window is in a normative way, we understand that the answer is not "an empty space left somehow;" but in more general terms, it's a lesion on a surface. When I claim that

the turning of the box in House 2 causes the exterior box to get torn, I say, "the empty spaces that appear on the wall when the two systems are overlapped, are not windows that are obtained with the random drilling of surfaces, but they are lesions." (Hermenötik Hayaletin Ölümü: Peter Eisenman'ın Yapıtında Göstergenin Maddileşmesi, 2012, p. 39)



Figure 4.9: Mies van der Rohe, Farnsworth House, Designed by in 1945 and constructed in 1951 (Url 15).

Eisenman uses the term 'conceptual' to differentiate his works from the traditional design approaches, indeed (Eisenman, 1970). It is because he does not focus on the object of this work; he is still a part of the modernist system. The term 'conceptual' here will prioritize the idea in the difference between the object and the idea. When experiencing this structure, the viewer will first perceive a conceptual or virtual house, the real structure is secondary. A discussion will begin with the physical form of the House, but it will result in reading as ideated forms. The reality will be exposed to digging until the underlying transcendent object has been revealed out. In short, this means replacing the physical with the intellectual.

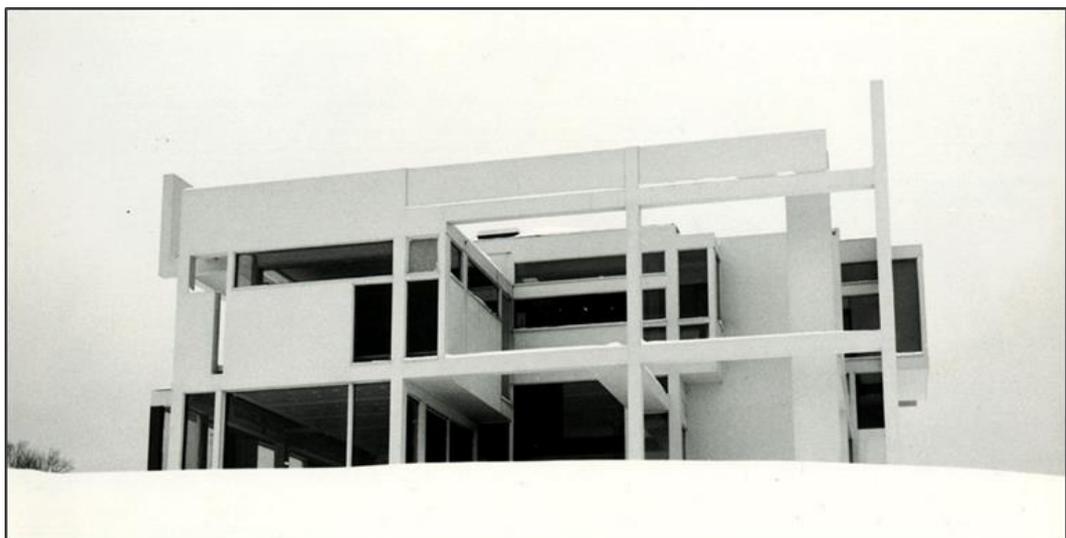
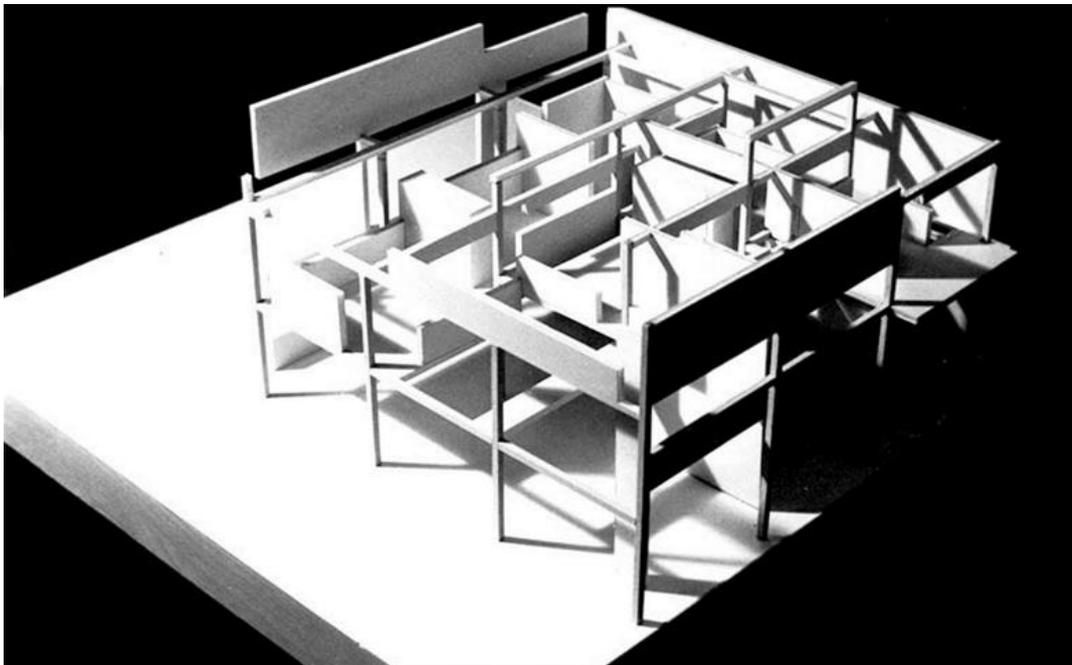


Figure 4.10: Eisenman, House 2, Hardwick, Vermont, 1969 - 1970 (Url 16).



5. CONCLUSION

Humans have a number of approaches in order to ascribe a meaning to the being. Instead of trying to make sense of existence with matters, trying to find a reason to make matters meaningful find out transcendental qualities beyond the visible. Some call this 'the essence', some call 'the idea', and some others 'the divine'. But necessarily, a situation, referring to superior qualities, govern the being there. When it is considered the creations of humankind on the basis of this view, the human will subject its future creations to an intellectual process and consider such creation from the very beginning; in this process, the creation will come out not as known or learned situations, but as envisaged in mind.

Architectural tectonics can also be seen as a new approach and regulation to the materials which are the means of reaching the transcendent. The architect reveals the universe, himself/herself and his/her act of creation, representation of the transcendent by tectonic expressions. Tectonic expression is the result of human beings' perception of the world and their inferences about the existence. Therefore, it leads to spatial sensations that are different from the usual sensory forms and the spatial magnitudes that daily life has given us. Because of this reason tectonic expressions create the invisible, not the visible. This means that tectonic reverses its tendency to shape appearance.

In immaterial tectonic expressions, the concepts come into being not from the things we know, but with their new meaning. For example, the wall means the nature just like in Mies Van der Rohe's Farnsworth house. Just like in Ando's cross, the light will enable a different way of seeing, which is ascribed transcendent feelings, not just a thing coming from the window, which addresses to the sense of vision in its traditional meaning. Openings cannot be described by figures like doors, windows, etc. As in *Reading Between the Lines*, expressions about the figures destroy themselves, sometimes by intertwining, sometimes by changing, transforming to other meanings (Figure 5.1). Sometimes meaning does not correspond directly to a single concept.

Trying to comprehend the true meaning of a creation, questioning the other thing than the visible opens up all interpretive depths of a creation. All these interpretations about the creation serve more of a metaphysical purpose than a functional one. The conceptual equivalents of the physical states are now represent a beautiful intersection of existence and absence which all the best architecture does in order to enrich meaning of creations. All these conceptual permeabilities can cause structural permeability. It can be said that construction, material and even traditional names of structures they create (church, hospital, house, etc.) can only be discussed in a permeable, polysemous level.

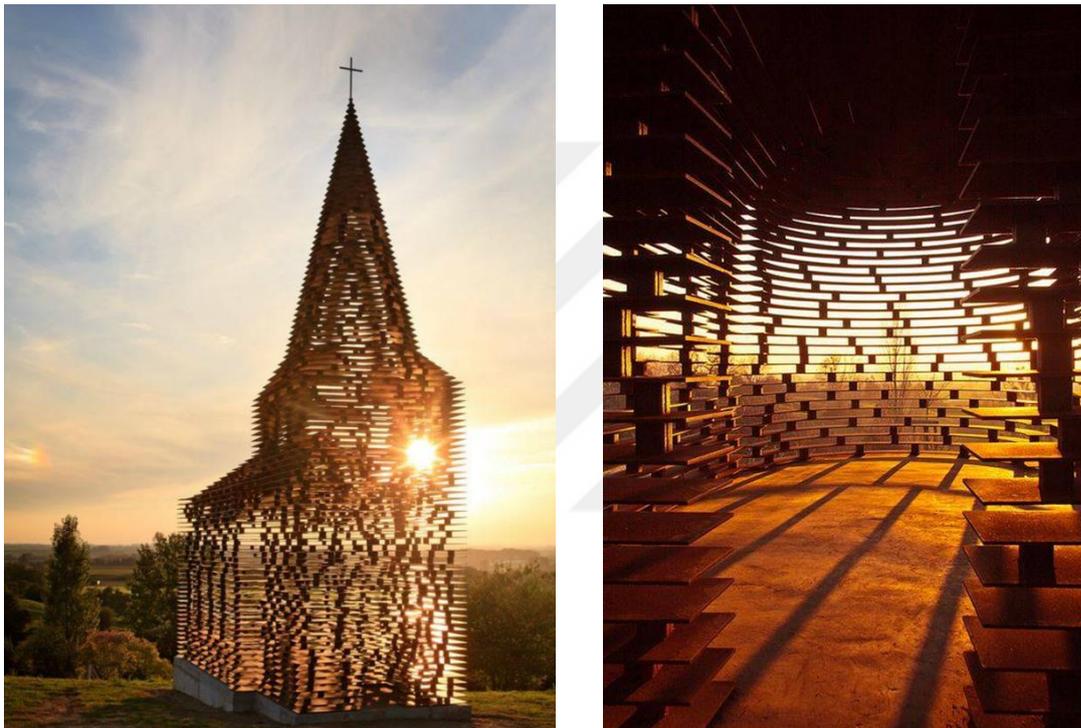


Figure 5.1: Reading Between the Lines, church by Gijs Van Vaerenbergh, Belgium, 2011 (Url 17, Url 18).

Blurring the boundaries between creation and garden, inside and outside, the natural and the artificial, physical existence of a creation and its immaterial state are intertwined. This situation is such that sometimes transcends the strictly architectural experiment, reflection, a physical involvement with the end result. For example, the boundaries between death and life are blurred, as in Igualada Cemetery, isolating death from life becomes quite different (Figure 5.2). Although the cemetery is like a small city established for the dead, it is a social area for living at the same time, even closer to the living, than the dead.



Figure 5.2: Enric Miralles and Carme Pinos, Igualada cemetery, Spain, completed in 1994 (Url 19).

Immaterial tectonics reveal expression of transcendent properties by the transformation of materials, the human perception, and value judgments. For example, a white paint transforms nothingness as in the painting of Malevich, musical notations turn into some human voice as in the Cage's composition. Matter destroys itself in the perception of creation. As seen in the Blur Building example, the fact that what defines a building is fog, the physical entity can turn into the situations of disappearance at any moment.

As Zumthor's statement, transformation of materials is perhaps an alchemy (Thinking Architecture, 2006). It is aimed to convert material which is the inferior into the superior which pure and perfect by going through an intellectual process. Thus, it can be said that the value in the material can come to exist. Materials can get rid of correlate with matter by getting itself closer to superior. Therefore, materials in architecture reach significance as a consciousness to convey the transcendent. This consciousness activates matter so matter finds itself as a meaningful expression beyond the physical in the volume to be created.

It can be said that the way of construction freely makes tectonic expressions possible because the rules and structural concerns that are learned before are not so important.

It is organized for each creation independently and from the very beginning. It cannot be produced any structural detail in a creation because it belongs to the design integrity. That is why when they create, the way of constructions destroy themselves. For example, when Reichstag building was shrouded with silvery fabric, it highlighted the features and proportions of the imposing structure and it came to stand on a weird metaphysical field (Figure 5.3). Turning the creation into a perceptual thing, rather than making it contain an object and having that speak itself, rather than its structural properties, indicate that the objectives of this practice are quite different from the traditional material approach. It blurs the distinction between the building and the daily life some more. It is like another a body dressed as the people are dressed in daily life, and it has its own lines. However, this is not alienation actually. The function of the building does not change, but just a new quality is added stimulating the creative perceptions and interpretations of the users.



Figure 5.3: Christo and Jeanne Claude, Wrapped Reichstag, Berlin, 1971-95 (Url 20).

In immaterial tectonics, every piece of a creation are considered as necessary, entire and perfect like universe. Therefore, the creation traces infinite, transcendent feelings. It presents spatial saturation, creates a deep satisfaction on the perceptions. Therefore,

there is a situation in which the form disappears. What is present is a place defined at infinite universe, it's like the 'atmosphere' of Zumthor (Thinking Architecture, 2006). That is why, that the subject of an architectural creation is space can be said. Space is a known or perceived piece of the universe, where the boundaries are disappeared in eternity, leads to metaphysical perception.

In immaterial tectonic expressions, a space is in mystical or metaphysical area. Because it is in the essence and simple situations that connects its conditions of existence to causes. When tangible elements of the material world are destroyed, the things remaining are reasons for its existence. These reasons define a place where makes both itself and individuals closer to the superior. This situation can be possible by searching for the essence or trying to be a part of the essence. Therefore, it can be mentioned that there is a fourth dimension in a space because a divine depth becomes a dimension of the space. The space goes beyond the ordinary and known meanings, becomes timeless, moves, feels like other kinds of depths from every glance. As in Le Corbusier's Ronchamp, expressive and emotional qualities that create heightened sensations are added (Figure 5.4). Or, as in Ando's Church of Light, the space where the individual finds himself and the wealth of life and struggles to reach a deeper layer of self is created. Here, we see a point where the user can direct the space, a point where he also has to discover himself as a space. There is nothing to make infinite space a defined space, other than the deep awakenings that come into being themselves. Other spatial forces just remain as the elements that are beyond the sensational qualities, which serve as means for all these discoveries. The space is already at a point where it has already got eliminated from the artistic, engineering, and technical discussion and where the material has turned into a feeling.

There is no indication of the identity of a creator (architect, artist) in the immaterial expressions of the creatures. For example, in Frank Stella's paintings there is no sign to reveal his identity. There is just an impression that the artist wants to give. In architecture, unique productions emerge none of which resemble another by redesigning construction methods from the beginning every time. By using different elements as a means, architects create spaces that each of them serve another sense. A space opens itself to the architect's forming as a memoryless value. Architects generate boundary or volume with unique and non-repeating information. For example, Zumthor's spaces do not resemble each other, spaces are thought and formed for each

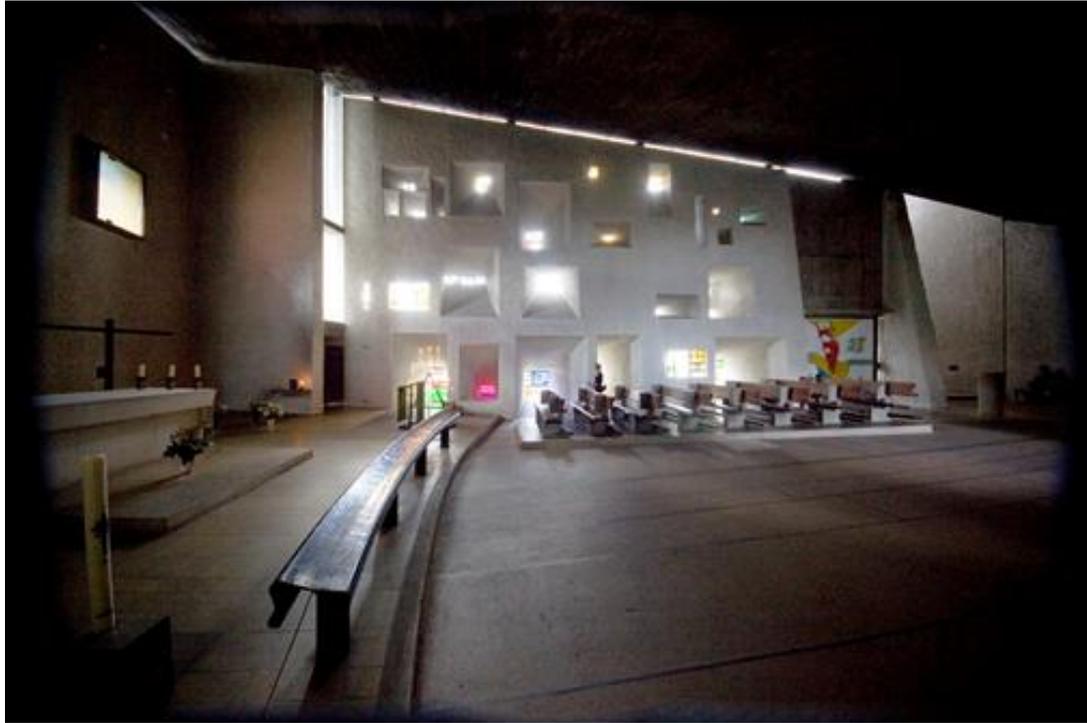


Figure 5.4: Le Corbusier, Notre Dame du Haut, Ronchamp, France, 1954 (Url 21).

creation from the beginning. Thus, a person who knows one of Zumthor's building cannot recognize any trace of Zumthor in another building.

As a conclusion, immaterial tectonic expressions attempts to explain a situation where the construction method, material, form and even architect are the means for such manifestation but destroy their individual qualities in the creation to which they lead. The material here involves a process like a transformation, metamorphosis. The factors melted within each other become a single essence so, it can be mentioned one single quality; the quality of transcendent. The creation exists one step beyond the intuition of it, or the viewer's confirmation or encouragement of the meaning production capacity; it exists as multiple meanings that were already there when the viewer encountered them. The creation itself is discussed. In fact, maybe it does not even allow to talk about itself. As it cannot respond to the situations we perceive with solely through perception, that is, to the senses, it creates a foundation for infinite inner feelings.

REFERENCES

- Akkach, S.** (2005). *Cosmology and Architecture in Premodern Islam: An Architectural Reading of Mystical Ideas*. Albany: State University of New York Press.
- Alberti, L. B.** (1988). *On the Art of Building in Ten Books*. (J. Rykwert, Trans.) Cambridge, Mass., and London: MIT Press.
- Alova.** (2008). Herakleitos'un. Y. v. Herakleitos'un Düşüncesi içinde, *Kırık Taşlar* (ALOVA, Çev.). Can Yayınları.
- Ando, T.** (1996). *Light, Shadow and Form*. (F. D. Co, Dü.) London: Phaidon.
- Baek, J.** (2009). *Nothingness; Tadao Ando's Christian Sacred Space*. Taylor & Francis e-Library.
- Battcock, G.** (1995). *Minimal Art: A Critical Anthology*. Berkeley, Los Angeles, California: University of California Press.
- Beek, J. V.** (2008). Adolf Loos- Pettern of Town Houses. In M. Risselada, *Raumplan Versus Plan Libre: Adolf Loos, Le Corbusier* (pp. 52-73). Rotterdam: 010 Publishers.
- Bürger, P.** (1985). *Theory of the Avant-Garde*. (M. Shaw, Çev.) Manchester: Manchester University Press.
- Cage, J.** (1961). Composition as Process Part 2: Indeterminacy. *Silence* (s. 35-40). içinde Middletown: Wesleyan University Press. reprinted in *Theories and Documents of Contemporary Art: A Sourcebook of Artists' Writings* (Berkeley, Los Angeles and London: University of California Press, 2012), 831-833.
- Carpo, M.** (2001). *Architecture in the Age of Printing: Orality, Typography and Printed*. (S. Benson, Trans.) Cambridge, Mass. and London: MIT Press.
- Cevizci, A.** (2009). *Felsefe Tarihi*. İstanbul: Say Yayınları.
- Coomaraswamy A. K.**, The Bugbear of Literacy, Bedfont, Perennial Books, pp 50-67, 1979.
- Corbusier, L.** (1927). *Towards a New Architecture*. (F. Etchells, Çev.) London: Rodker.
- Cüendioğlu, D.** (2012). *Mimarlık ve Felsefe*. İstanbul: kapı.
- Descartes, R. (1993). *Meditations on First Philosophy*. (S. Tweyman, Dü., & E. S. Ross, Çev.) London and New York: Routledge.
- Eisenman, P.** (1970). Notes on Conceptual Architecture: Towards a Definition. *Design Quarterly*, 78/79, 1-5.
- Fetterman, W.** (2010). *John Cage's Theatre Pieces*. New York: Routledge.
- Forty, A.** (2000). *Words and Buildings: A Vocabulary of Modern Architecture*. London: James&Hudson.
- Frampton, K.** (1995). *Studies in Tectonic Culture*. (J. Cava, Ed.) London: The MIT Press.
- Glaser, B.** (1966, september). Questions to Stella and Judd. *Art News*(65), 55-61. reprinted in *Theories and Documents of Contemporary Art: A*

- Sourcebook of Artists' Writings (Berkeley, Los Angeles and London: University of California Press, 2012), 140-146.
- Gropius, W.** (1947). Preface. In L. Moholy-Nagy, *The New Vision* (D. M. Hoffmann, Trans., pp. 5-6). New York: George Wittenborn.
- Hebly, A.** (2008). The Five Point and Form. In M. Risselada, *Raumplan Versus Plan Libre: Adolf Loos, Le Corbusier* (pp. 74-83). Rotterdam: 010 Publishers.
- Herzog, J., & de Meuron, P.** (1997). *137 Dominus Winery*. Retrieved september 1, 2017, from herzogdemeuron.com:
<https://www.herzogdemeuron.com/index/projects/complete-works/126-150/137-dominus-winery.html>
- Hill, J.** (2006). *Immaterial Architecture*. New York: Taylor & Francis.
- Judd, D.** (1965). Specific Objects. *Arts Yearbook*(8). reprinted in Theories and Documents of Contemporary Art: A Sourcebook of Artists' Writings (Berkeley, Los Angeles and London: University of California Press, 2012), 138-140.
- Kepes, G.** (1944). *Language of Vision*. Chicago: Theobald.
- Koliji, H.** (2016). *In-Between: Architectural Drawing and Imaginative Knowledge in Islamic and Western Traditions*. London and New York: Routledge.
- Krauss, R.** (2012). Hermenötik Hayaletin Ölümü: Peter Eisenman'ın Yapıtında Göstergenin Maddileşmesi. In H. Anay, *Biçimcilik; İkinci Kitap: Çeviri Metinler* (pp. 27-49). Eskişehir: ESOGÜ Mimarlık Bölümü.
- Kristeller, P. O.** (1990). The Modern System of the Arts. In P. O. Kristeller, *Renaissance Thought and the Arts* (pp. 163-227). New Jersey: Princeton University Press.
- Leepa, A.** (1968). Minimal Art and Primary Meanings . reprinted in *Minimal Art: A Critical Anthology* ed. G. Battcock (New York: E. P. Dutton and Co, 1968), 200-208.
- Lefebvre, H.** (2014). *Mekanın Üretimi*. İstanbul: Sel Yayıncılık.
- Loos, A.** (2008). The Principle of Cladding. In M. Risselada, *Raumplan Versus Plan Libre: Adolf Loos, Le Corbusier* (pp. 170-172). Rotterdam: 010 Publishers.
- Loos, A.** (2015). *Mimarlık Üzerine*. (A. Tümertekin, & N. Ülner, Trans.) İstanbul: Janus.
- Malevich, K.** (1959). *The Non-Objective World: The Manifesto of Suprematism*. Chicago: Paul Theobald and Company.
- Malevich, K.** (2017, April 15). Malevich - God is Not Cast Down. Retrieved September 1, 2017, from kupdf: https://kupdf.com/download/malevich-god-is-not-cast-down_58f13bddd0d605053da9830_pdf
- Mallgrave, H. F.** (2004). Introduction of Style in the Technical and Tectonic Arts, Or, Practical Aesthetics. In G. Semper, *Style in the Technical and Tectonic Arts, Or, Practical Aesthetics* (pp. 1-70). Los Angeles: Getty publication.
- Meyer, J.** (2010). *Minimalism*. London: Phaidon.
- Moffett, M., Fazio, M., & Wodehouse, L.** (2003). *A World History of Architecture*. London: Laurence King Publishing.
- Moholy-Nagy, L.** (1947). *The New Vision* . New York: George Wittenborn.
- Nyman, M.** (1999). *Experimental Music: Cage and Beyond*. New York: Cambridge University Press.
- Pallasmaa, J.** (1996). *The Eyes of the Skin: Architecture and the Senses*. London: Academy Editions.

- Panofsky, E.** (1968). *Idea: A Concept in Art Theory*. (J. J. Peake, Çev.) Columbia: University of Southern Carolina Press.
- Plato.** (1975). *Philebus*. (J. Gosling, Trans.) Oxford: Clarendon Press.
- Platon.** (2015). *Timaios*. (F. Akderin, Çev.) İstanbul: Say Yayınları.
- Porter, T.** (1997). *The Architect's Eye: Visualization and Depiction of Space in Architecture*. London: E&FN Spon.
- Riegl, A.** (1992). *Problems of Style: Foundations for a History of Ornament*. Princeton, N.J.: Princeton University Press.
- Rose, B.** (1965, October-November). ABC Art. *Art in America*, 57-59. reprinted in *Minimal Art: A Critical Anthology* ed. Gregory Battcock (New York: E. P. Dutton&Co, 1968), 274-297.
- Rowe, C., & Slutzky, R.** (2012). Saydamlık: Literal ve Fenomenal. H. Anay içinde, *Biçimcilik* (s. 5-26). Eskişehir: Eskişehir Osmangazi Üniversitesi Yayınları.
- Rustom, M.** (2014). *Sufi Metafiziği*. İstanbul: Nefes.
- Sarı, E.** (2016). *İlk Çağ (Antik Çağ) Felsefesi Tarihi*. Antalya: Net Medya Yayıncılık.
- Semper, G.** (2004). *Style in the Technical and Tectonic Arts, Or, Practical Aesthetics*. (H. F. Mallgrave, & M. Robinson, Trans.) Los Angeles: Getty Publication.
- Semper, G.** (1989). On Architectural Styles. In G. Semper, *The Four Elements of Architecture and Other Writings* (pp. 264–284). Cambridge: Cambridge University Press.
- Smith, K.** (2012). *Introducing Architectural Theory: Debating a Discipline*. New York: Routledge: Taylor & Francis Group.
- Sunar, C.** (1971). PARMENİDES VE VARLIK MESELESİ. *Ankara Üniversitesi İlahiyat Fakültesi Dergisi*, 19(1), 17-27.
- Şentürk, A.** (2016). *Küçük Oda Dokuz Pencere*. İstanbul: GOA Basım Yayın.
- Vitruvius.** (2015). *Mimarlık Üzerine On Kitap* (Vol. 6). (S. Güven, Trans.) İstanbul: Şevki Vanlı Mimarlık Vakfı.
- Weston, R.** (2003). *Materials, Form and Architecture*. London: Laurence King.
- Wigley, M.** (1999). Paper, Scissors, Blur. *Another City for Another Life: Constant's New*, 9-34.
- Wurman, R. S.** (1986). *What Will Be Has Always Been: The Words of Louis I. Khan*. New York: Rizzoli International Publications.
- Zaera, A.** (2005). Interview With Jacques Herzog; Continuities. In *El Croquis; Herzog & de Meuron 1981-2000* (pp. 12-26). Madrid: El Croquis.
- Zevi, B.** (2015). *Mimarlığı Görebilmek*. İstanbul: Daimon.
- Zumthor, P.** (2006). *Thinking Architecture*. Basel: Birkhauser.
- Url 1 <<http://www.chartattack.com/news/2015/11/30/4-33-john-cage-remix/>> accessed 06.07.2017
- Url 2 <<http://tmagazine.blogs.nytimes.com/category/culture/page/24/>> accessed 04.07.2017
- Url 3 <<https://diaart.org/program/archive/fred-sandback-sculpture-exhibition/year/1997>> accessed 10.05.2017
- Url 4 <<https://architecturesaveourlives.wordpress.com/2012/02/16/pecha-kucha/>>
- Url 5 <<http://www.archdaily.com/101260/ad-classics-church-of-the-light-tadao-ando>> accessed 12.04.2017
- Url 6 <<https://www.flickr.com/photos/schroeer-heiermann/6757184667/in/photostream/>> accessed 8.03.2017

- Url 7 <<http://www.archdaily.com/798340/peter-zumthors-bruder-klaus-field-chapel-through-the-lens-of-aldo-amoretti> > accessed 07.05.2017
- Url 8 <http://www.dsrny.com/projects/blur-building/DS+R-Blur_cropped.jpg> accessed 07.05.2017
- Url 9 <http://images.adsttc.com/media/images/500f/2460/28ba/0d0c/c700/1d40/large_jpg/stringio.jpg?1417083264> accessed 07.05.2017
- Url 10 <<https://theredlist.com/media/upload/2016/02/22/1456138637-56cae98da08ad-006-herzog-de-meuron-dominus-winery-by-michael-lange-theredlist.jpg>> accessed 06.05.2017
- Url 11 <<http://www.dominusestate.com/wp-content/uploads/2015/03/winery-features-02.jpg>> accessed 05.05.2017
- Url 12 <<http://www.nytimes.com/2006/12/24/arts/design/24kimm.html>> accessed 05.05.2017
- Url 13 <<http://www.flowersway.com/visite/villa-savoye-le-corbusier-659>> accessed 05.05.2017
- Url 14 <<http://gregzlab.com/blog/villa-savoye/>> accessed 05.05.2017
- Url 15 <<http://farnsworthhouse.org/>> accessed 05.05.2017
- Url 16 <<http://www.eisenmanarchitects.com/house-ii.html#images>> accessed 05.05.2017
- Url 17 <<http://designcollector.net/likes/reading-between-the-lines-church-by-gijs-van-vaerenbergh>> accessed 05.05.2017
- Url 18 <<http://www.archdaily.com/298693/reading-between-the-lines-gijs-van-vaerenbergh/50b50488b3fc4b1634000083-reading-between-the-lines-gijs-van-vaerenbergh-photo>> accessed 05.04.2017
- Url 19 <http://www.landezine.com/wp-content/uploads/2009/08/mg_3065.jpg> accessed 04.01.2017
- Url 20 <<http://christojeanneclaude.net/projects/wrapped-reichstag>> accessed 04.01.2017
- Url 21 <<http://www.archdaily.com/84988/ad-classics-ronchamp-le-corbusier/5037e72f28ba0d599b00038e-stringio-txt>> accessed 04.07.2017

CURRICULUM VITAE

Name-Surname : Beyza Nur Batı
Nationality : Turkish
Date and place of birth : 02.01.1991 Konya
E-mail : beyzabati@windowslive.com

EDUCATIONAL BACKGROUND:

- **Bachelor's Degree** : 2015, Bilkent University, Faculty of Art, Design and Architecture, Interior Architecture and Environmental Design
- **Post Graduate** : 2017, TOBB University of Economics and Technology, Department of Architecture, Architecture

PROFESSIONAL EXPERIENCE :

Year	Company	Position
2015	ESTA İnşaat	Interior Architect and Environmental Designer
2015	Kolezyum Mimarlık	Interior Architect and Environmental Designer
2014	EKHO Mimarlık	Interior Architect as Intern
2013	A4 Mimarlık	Interior Architect as Intern

FOREIGN LANGUAGE: English

PUBLICATIONS, PRESENTATIONS AND PATENTS DERIVED FROM THESIS:

- **Batı, B. N., Sönmez, M.** 2017. Immaterial Architecture. *LIVENARCH 5th International Congress*, ISBN 978-975-6983-95-9