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A Genealogy of "Phenomenology" in Architectural Research: An Epistemology Discussion through Dissertations

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Abstract

Purpose

Throughout the scientific process, architectural research has always been in tendency to highlight some research fields according to the spirit of the periods. This study is an inquiry on deciphering such "research trends" in architectural research within the framework of a specified area of study. This inquiry aims to draw a genealogy of "phenomenology" within the realm of architecture by making a specific discussion on whether this issue has been a privileged research subject or not.

Design/Methodology/Approach

In order to make an analysis on privileged subjects of particular periods, it is decided to use some dissertations, which are obtained from ProQuest database. The methodological approach of the study begins with dividing the periods of architectural research into six decades, which starts from 1960's up to the present. After the separation of the periods, 3 major keywords are chosen to be questioned. The dissertations are chosen among the results obtained by scanning the keywords at once, which are *phenomenology*, *architectural body* and *spatial experience*. The chosen dissertations are grouped according to their decades. All findings are gathered in a table, which includes lots of information such as the doctoral dissertations, annotations of their approaches, their numbers from decade to decade, epistemological frameworks, theoretical perspectives and methodologies.

Findings

As a result, *architectural phenomenology* appears as a privileged subject in architectural research. However, the findings show that there are some notable changes especially in the terms in certain decades. While *meaning* term had been used before 1980s, *phenomenology* appears as a favored term after 1980s. Especially with the late 2000s, architectural phenomenology begins to be a privileging research area. As a result of being a research trend, a sub-field emerges after 2000s that directly criticizes the theories of phenomenology itself, which is *post-phenomenology*.

Research Limitations/Implications

Because of not reaching much effective results, the other databases are not employed. ProQuest is the only database throughout the research process, which provides the most effective results in reaching proper dissertations. ProQuest already includes nearly all results other databases reached.

Originality/Value

To see a genealogy of the keyword itself from *meaning* to *phenomenology* provides to position this philosophical field in architectural research. In addition to identify popular research subjects according to the spirit of the decades in science, this study is a critical epistemology discussion within the field of architectural research. Such an epistemology discussion also provides to see the continuity and the changes of both the terms and the study fields over the years.

Keywords: Architectural research, epistemology, genealogy, meaning, phenomenology

INTRODUCTION

Architecture and its research field are based on an extensive ground, which embraces a comprehensive knowledge of different studies. A variety of theoretical understandings of particular subjects also structure the framework of this knowledge. Throughout its scientific process, architectural research is in tendency to highlight some research fields and its main subjects, which are open to change according to the spirit of the periods. At the point where some particular issues are privileged in scientific process, it is possible to mention about "research trends" in the theoretical ground of architecture, which define a general direction to study on.

This paper is an inquiry on deciphering if there are some certain established traditions in architectural research within the borders of a specific area of study. At that point, it is also important to aware of both the nature of architectural research and epistemological positions of its knowledge. As a result of that, the purpose of the study is not only to identify popular research subjects of particular periods in science but also to progress a critical epistemology discussion within the field of architectural research. In this paper, it is attempted to draw a genealogy of a specified area of research, which is the field of "phenomenology" within architecture.

The use of the term "*genealogy*" as a research method goes back to Friedrich Nietzsche's book of 1887, which is titled "*On the Genealogy of Morality: A Polemic*" (*Zur Genealogie der Moral: Eine Streitschrift*). Through a genealogical method, Nietzsche (1887/2007) constructs a systematic research on the development of 'morals' throughout history. Inheriting from Nietzsche, Michel Foucault (1971/1977) evoked the concept of genealogy in the study of "*Nietzsche, Genealogy, History*". While Foucault uses "archaeology" as both the term and method, which can be seen in "*The Archaeology of Knowledge*" (*L'archéologie du savoir*) in 1969, he evolves this method of "genealogy" especially in the book of "*Discipline and Punish: The Birth of the Prison*" (*Surveiller et Punish: Naissance de le prison*) in 1975. Similar approaches that trace the knowledge of a specific concept or research field also continues with other studies, for example as in the essay of "*A Genealogy of 'Globalization': The Career of a Concept*" (James and Steger, 2014). At that point, what this study attempts is to make an epistemological discussion by drawing a genealogy of a research field in architecture, which is phenomenology.

AN OVERVIEW TO THE PHILOSOPHIES OF SCIENCE

Before making a specific discussion on the scientific area of architectural research, it would be appropriate to take a look briefly to science, scientific knowledge and even the philosophy of science. At that point, to discover some significant models in the scientific research process emerges as an important issue in order to understand the philosophical

perspective of science especially from some philosophers of science such as Karl Popper, Thomas Kuhn and Imre Lakatos.

Karl Popper (1959/2005), for example, sees scientific practice as an empirical and testable process. It means that, theory of science renders itself as being falsifiable. Popper's model of science, which is actually defined as *falsificationism*, is clearly based on conjectures and refutations. What a Popperian approach puts forward is that demarcation criterion between science and non-science is based on falsificationism. This is the model in which bold theories are proposed at first, and then a critical examination is applied to these theoretical propositions. In Popper's model, falsification acts as the unique criterion of science. As a result of the fact that the ground of science is always open to falsifiability, this model is not at the secure side of science. This position of science directly stems from the commensurability of theories. And thus, science is a progress that moves in a linear and continuous way by gathering new knowledge. The knowledge of science is produced not by an individual, but rather within a community. Popper's science is a criticism based model that continuously problematizes the fundamental theories in order to put forward new theories.

According to Thomas Kuhn (1962/1970), science is based on paradigm that corresponds to the fixed fundamentals of normal science such as shared theoretical beliefs, values and techniques. Kuhn's model of science basically consists of some steps, which progress in the evolution of science. The first step is normal science in which a paradigm is established as the basis for the scientific research. Science is advanced through some mind-set, tool-set and ground of this paradigm. Because it is prioritizes just to solve the problem, this process resembles a *puzzle-solving model*. Throughout the period of the science, the ground is kept stable in order to reach a solution. As a result, if some anomalous results emerged in science takes a risk for the whole initial process, they can be tolerated for both the protection of this paradigm-based ground and the continuity of scientific research. But, at the point of serious anomalies developed, this step is the crisis point that clearly requires a paradigm shift. Kuhn defines these extreme circumstances as the points of revolutionary science. The revolution is seen as an exceptional process in normal science and needs to establish a new paradigm for scientific research. So, Kuhn's science is a paradigm-based model that does not prioritize to question the central theory, but rather emphasize to solve the puzzle by protecting the ground.

Imre Lakatos (1970) mentions about a methodology of a scientific research program, which locates at the intersection of the models of Popper and Kuhn. According to Lakatos, the criteria of a scientific process is defined as *sophisticated falsificationism*. Contrary to being simply trial and error, it is focused on whether a research program can be falsifiable or not. This model basically consists of a hard core in which some fundamentals are protected from refutation through a

protective belt. While this hard core can be considered as the normal science of Kuhn's model, the protective belt generates a zone that is more flexible to change with auxiliary hypotheses such as Popper's model of science. Contrary to the hard core, this zone is open to the productions of novel facts. As a result of that, Lakatos' model suggests a progressive scientific progress unlike a degenerative process that is in a tendency to use always the same ground.

ARCHITECTURAL RESEARCH: GROUNDING ARCHITECTURE ON THE THEORY OF KNOWLEDGE

At the point where some significant models in scientific research process are discussed, to discover the ground of architectural research appears as a requirement. The framework of architectural research is a multi-layered ground that is open to many different research fields. So that, this situation always takes architecture beyond the borders of its discipline. For the reason that architecture and its research field are in tendency to adopt from other disciplines, the knowledge of architecture is directly ready to broaden the definition of its discipline. Jane Rendell (2004) argues the issue of architectural research concerning the importance of creating a multidisciplinary environment for research. According to Rendell (2004, p.143), "architecture encompasses several disciplines and uniquely brings together modes of research that are often kept apart... and so provides possibilities for multi- and interdisciplinary research". This is an attempt to see architectural research at the core of different paradigms of knowledge and research methodologies. At this point, architecture and especially its knowledge obviously need to redefine and position its ground in order to legitimate itself as a discipline.

To position architectural research in the field of discipline is directly related to discover the nature of knowledge. The scope of knowledge does not provide a limited structure which is closed within its own discipline. On the contrary, its nature has the potential to bring separate fields together and to reveal alternative viewpoints. Nigel Cross (2001) draws attention to the existence of many forms of knowledge, which builds up the histories and theories of each discipline. In this case, Cross (2001, p.53) defends that what is significant in design research is "...to draw upon those histories and theories where appropriate, whilst building our own intellectual culture, acceptable and defensible in the world on its own terms". In a similar way, the knowledge of architecture reaches to the fields of other studies in order to transfer the theories at first, and then to generate new ideas on its own discipline. Thus, it acts as a tendency that tries to seek beyond its own ground and generate a new form of action in discipline. That is to say, architecture as a discipline and architectural research are located at the intersection of a wide variety of both disciplines and theories.

When the existence ground of any discipline or its sub-disciplines are examined in research process, various types of theories emerge to guide

the knowledge of architecture. At the point of dealing with the knowledge of a study field, this is the key issue to mention about "theory" issue, which defines the borders of the scope of knowledge. Zeynep Mennan (2006, p.65) focuses on what theory refers to and so presents it under three facets by generally saying that "...it invades all disciplines and research fields, ...asks for a redefinition that is not to stabilize itself in a painful period of paradigm change, and ...is a metaphorical representation that is currently subject to dislocation". Especially, the state of being in invasion to other disciplines directly corresponds with the knowledge of architecture. On the one hand, the understanding of going beyond the borders gains architecture discipline an unstable character, but on the other hand this situation supports architecture to stay always dynamic and changeable. In other words, alternative questions or new thought paradigms expand the limits of architectural research inevitably by transforming or evolving the present ground of discipline. Moreover, to act with an approach as the unity of disparate fields of knowledge develops interactions between study fields and thus interdisciplinary relationships in architecture. To say that in a clear way, at the point where collaborative processes generate new fields of knowledge, architectural research is significantly influenced by other disciplines. And, as long as the nature of architecture discipline opens its door to other fields of study, the knowledge of discipline continues to transform and evolve to new combinations, because of the possibility of new interpretations.

With an approach of legitimating disciplines, John Greco (1999) addresses to the main questions of the theory of knowledge in order to discover what epistemology is. According to this, "epistemology, or the theory of knowledge, is driven by two main questions: "What is knowledge?" and "What can we know?". If we think we can know something, as nearly everyone does, then a third main question arises: "How do we know what we do know?". Most of what has been written in epistemology over the ages addresses at least one of these three questions" (Greco, 1999, p.1). As a result of asking such questions, different epistemological positions become visible within the research field of discipline and its knowledge. These positions actually stem from major distinctions in changing theoretical perspectives such as context, techniques or methodology. And also in architectural research, to establish structures according to different approaches is the source of to ground the theories of knowledge in alternative positions.

As a result of the fact that to observe various lines of inquiry is directly related with all of the discipline's main questions, Greco (1999, p.24) mentions about a number of different directions that has been developed in epistemological positions. These new directions in theory of knowledge can emerge such as feminist epistemology and social epistemology or other epistemic theories related with artificial intelligence or postmodernism. But, beyond these new sub-theoretical perspectives, it is inevitable to address to the main epistemological

positions in research field. At that point, Luke Feast and Gavin Melles (2010) refer to three of them, which are the subjectivist position, the constructionist position and the objectivist position. As a consequence of analyzing the differences between the aspects of these epistemologies, Feast and Melles (2010) clearly mention about that "being epistemologically aware requires that at each point in the research process we recognize that we make a variety of assumptions about human knowledge, the realities encountered in the human world and interpretability of our findings". Put it in other ways, asking major questions to research field of a discipline varies the issues concerning to its theory of knowledge. And also, changing theoretical perspectives generates different epistemological positions, which significantly gain discipline to act with a comprehensive viewpoint.

METHODS: AN EPISTEMOLOGY DISCUSSION IN ARCHITECTURAL RESEARCH

This study is an inquiry on making an analysis on privileged subjects of particular periods in architectural research. In addition to detecting whether there are any popular research subjects according to the spirit of the decades in science, this is actually to decipher "research trends" within the framework of a specified area of study. Such an epistemology discussion also provides to see the continuity and the changes of both the terms and the study fields over the years. In the scope of this inquiry, the discussions are structured within the framework of "*phenomenology*" subject in architectural research. This is a process of the constitution of a database that will support to develop a comprehensive analysis on terminologies, epistemological frameworks, theoretical perspectives and methodologies of this specified research field.

To Reveal the Evolution of Phenomenology through Literature Review

As the result of elaborating a research field, which is determined as *phenomenology*, it is expected to find both some continuities in research trends and breaking points in terms. Because, although it is actually a term belonging to philosophy, it has passed into the research field of architecture and has started to belong to the knowledge of this discipline by evolving over time in various aspects.

Although the traces of phenomenology can actually be seen in the field of philosophy much earlier, 1900s and later is especially important to follow. In 1900-1901, Edmund Husserl wrote a foundational book in this field as "*Logical Investigations*" (*Logische Untersuchungen*), which was published as in two volumes. By prioritizing "the theory of the *essences*", Husserlian viewpoint (1900-1901/2001) associates phenomenology with "to go back to *the things themselves*". In 1927, Martin Heidegger makes a major contribution to phenomenological ground through an existential viewpoint with the book of "*Being and Time*" (*Sein und Zeit*).

Similar approaches continue with many of his subsequent works, especially as in *"The Origin of the Work of Art" (Der Ursprung des Kunstwerkes)* in 1950 and in *"Building, Dwelling, Thinking" (Bauen Wohnen Denken)* in 1951. Through an existence-based perspective, Heidegger discusses lots of terminologies such as *Dasein*, *Being*, *being-in-the-world*, *dwelling* and *poetry*. While philosophical phenomenology expands its ground, Maurice Merleau-Ponty occupies a very fundamental place on this ground. While Heideggerian approach mostly deals with the metaphysical aspects of the subject, Merleau-Ponty mentions about the embodied experience of human body with the world, especially with the work of *"Phenomenology of Perception" (Phénoménologie de la perception)*, which is published in 1945. Moreover, other works such as *"Sense and Non-Sense" (Sens et non-sens)* in 1948 and *"The Visible and the Invisible" (Le visible et l'invisible)* in 1964 support to strengthen the theoretical grounding of phenomenology by conceptualizing some terms like *body*, *embodiment*, *flesh*, *chiasm* and *perception*.

Although being a philosopher, Gaston Bachelard associates phenomenology with architecture in his 1958 book, *"The Poetics of Space" (La Poétique de l'Escape)*. By focusing especially on house, Bachelard (1958/1964) intends to discover the relationship between a physical space and the feelings it generates. In time, some architectural phenomenologist develops this research field by constituting their particular theoretical interpretations. Christian-Norberg Schulz has become a pioneer in the field of architectural phenomenology with his seminal works such as *"Intentions in Architecture"* in 1963, *"Existence, Space and Architecture"* in 1971 and *"Genius Loci: Towards a Phenomenology of Architecture"* in 1979. The knowledge of phenomenology broadens its borders through the discourses on *existential space*, *dwelling*, *poetry*, *genius loci (spirit of place)*, *character* and *meaning* issues. To translate phenomenology from philosophy to architecture continues with Steven Holl. Especially by adopting from Merleau-Pontian perspective, Holl contributes the theory of architectural phenomenology with the works of *"Anchoring"* in 1989 and *"Intertwining"* in 1996. Additionally, Holl wrote an essay about authentic physical and *sensory experience* as *"Questions of Perception: Phenomenology of Architecture"* for a journal in 1994, the other writers of which are also Alberto Perez-Gomez and Juhani Pallasmaa. In that study, while Perez-Gomez (1994) aims to discover the genuine *meaning* of architecture through a series of terms like *poiesis*, *being*, *inhabit*, *nature* and *chora* in the essay of *"The Space of Architecture: Meaning as Presence and Representation"*, Pallasmaa (1994) discusses the physical, sensual and embodied essence of architecture in the essay of *"An Architecture of Seven Senses"*. Among many theoretical works of Pallasmaa, *"The Eyes of the Skin: Architecture of the Senses"* written in 1996 appears as a foundational book for architectural phenomenology. In that study, Pallasmaa (1996) problematizes what the *essence* of

architecture is by making a discussion on the role of body and the *senses* in architectural *experience*. And, Peter Zumthor (2006a, 2006b) also adds a new theoretical interpretation with the books of "*Thinking Architecture*" in 1998 and "*Atmospheres: Architectural Environments, Surrounding Objects*" in 2006. Especially by elaborating atmosphere issue, it is questioned how *the body of architecture* gains a *poetic character* to space. Similar approaches associating architecture with phenomenology also continue with different theorists. As a result, all these transformations on the knowledge of phenomenology shows that it is inevitable to observe an increase in interest in some periods and even some evolutions in terminology through decades according to the changes in the literature.

To Construct an Organized System through Dissertations

First of all, architectural research and its periods are divided into six decades, which start from 1960's up to the present. In order to reach an organized system according to the changing periods, each decade acts as a base for dissertations, which are distinguished studies in the specified area of research. After the separation of the periods as decades, 3 keywords are chosen for each decade in order to launch the search for dissertations, which will be neither too specific nor too general. For the field of phenomenology, the keywords are determined as "phenomenology", "architectural body" and "spatial experience". *Phenomenology*, as a keyword, is the main concept of the selected research field. The other major concepts of this field, which are *body* and *experience*, are transformed to *architectural body* and *spatial experience* in order to describe the position of this study area in architectural research. After that, these three search terms are researched in academic databases all three at once. As a result of scanning other academic databases, ProQuest is employed as the only database throughout the research process, which provides the most effective results in reaching proper dissertations.¹ As a result, all findings derived from this database such as the doctoral dissertations, annotations of their approaches, their numbers from decade to decade, theoretical perspectives, methodologies and epistemologies used are gathered in a form of a table as in *Table 1*, which will comprise lots of information of the research genealogy at the final step to be discussed critically.

¹ The other databases scanned are METU Library Search, Bilkent Library Search, Publication and Documentation Department of YÖK (Council of Higher Education) Thesis Center and Networked Digital Library of Theses and Dissertation (NDLTD). However, none of them is preferred to employ in this study because of not reaching much effective results. In addition, ProQuest already includes nearly all results these databases reached.

Table 1. The form of table in which all databases will be gathered

DECADE	KEYWORDS	NUMBER OF DISSERTATIONS	SOURCE	EPISTEMOLOGY	THEORETICAL PERSPECTIVE	METHODOLOGY/ METHODS	ANNOTATIONS
1960s							
1970s							
1980s							
1990s							
2000s							
2010s							

In the process of reaching the dissertations from ProQuest database, some procedures are followed. Firstly, the selected keywords are especially researched all three at once by using *Advanced Search* tab. These keywords are scanned only in *doctoral dissertations* by excluding master theses because of the efficiency of their contribution to science. In order to obtain more effective results, it is prioritized to take part all the search terms not only in abstract but also in full text. And also, it is not applied any limitation on the language of dissertations. At that point, the findings include all of the dissertations completed in every discipline and their departments, which are based on the selected concepts. In order to reach only the dissertations that had been made in the field of architecture, *Architecture* option is selected among other study fields from the *Subject* tab. After reaching the filtered dissertations, which are made in the department of architecture, 3 dissertations are selected randomly for each decade to study on. Throughout the study, a discussion is progressed through these dissertations in order to analyze epistemological frameworks, theoretical perspectives and methodologies of the knowledge belonging to these periods and also to identify in which decades the field of phenomenology appears as a privileged area of study as a research trend in architectural research. Additionally, for the preceding decades in which the determined keyword does not bring any results, this study attempts to search for the genealogy of this term itself and to decipher the equivalent of this term for the corresponding decade.

This way of scanning a database also gives the results on how many dissertations are completed in each decade within the borders of the privileged keywords. To see a rate of the numbers of dissertations among not only the decades but also the disciplines provides the study to prepare additional graphics and pie charts. Because there are a variety of fields of study related to the selected search terms, a decision is taken to make the evaluation among only the first 9 academic departments, which are seen in the highest position of the list, and the sum of other studies, which represent the 10th pie, as can be seen in *Chart 1*. With both the main periodic tables and the additional charts, a critical epistemology discussion is attempted to progress on the genealogy of the field of phenomenology in architectural research throughout the study.

RESULTS AND DISCUSSION: TO DECIPHER THE GENEALOGY OF PHENOMENOLOGY

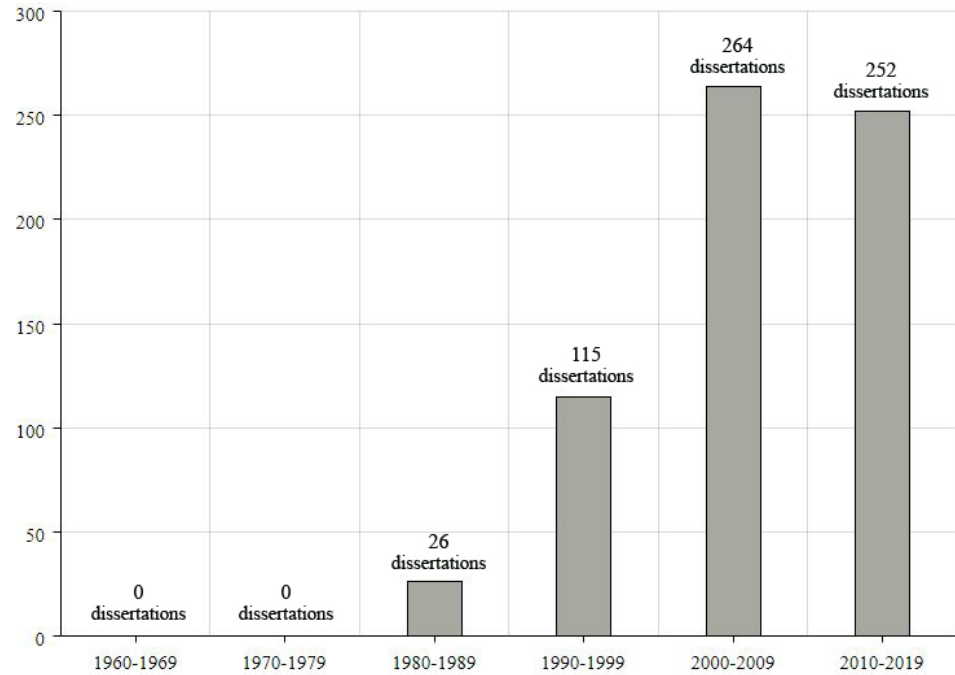
Architectural research and its theory of knowledge is in a position that opens its door to different various fields of study. Because of the existence of many forms of knowledge, which are ready to be imported, the borders of architectural research continuously expand with new combinations. At that point, *architectural phenomenology* appears as such a field that broadens the borders of both its discipline and

knowledge. Although phenomenology primarily belongs to the realm of philosophy, architecture adopts from its field of study. Because of the interaction between the fields of philosophy and architecture, an alternative knowledge and its terms becomes to appear in architectural research.

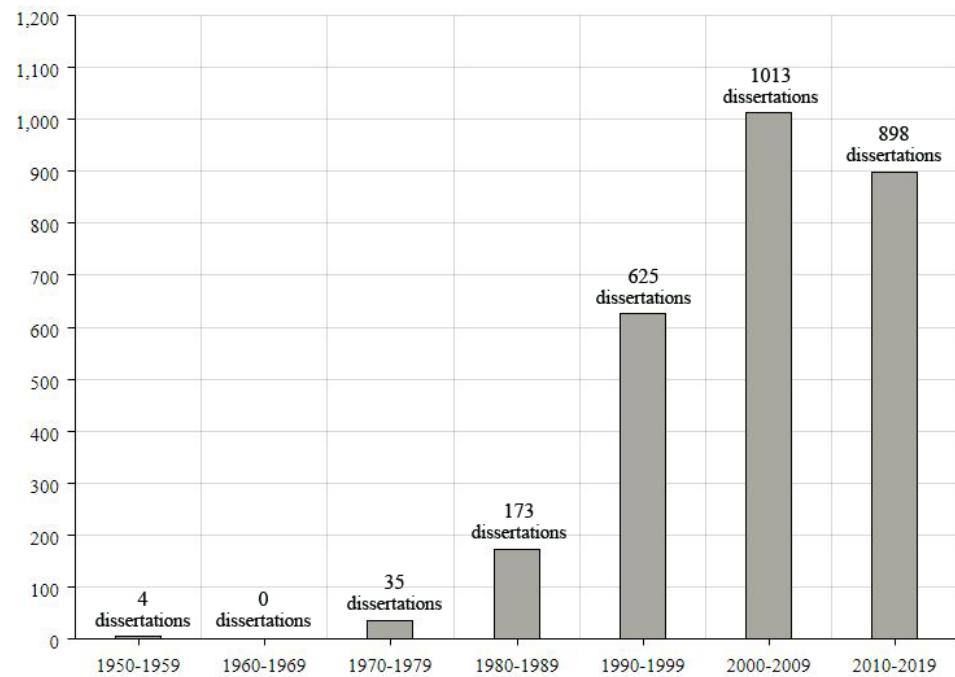
Before 1980s: To Search for *Meaning* in Architecture

As the result of scanning the keywords in ProQuest, database brings results in architecture only for the decades between 1980s and 2010s. However, it is a known fact that phenomenology, which is actually an aspect of philosophy, was studied in architectural research in the preceding years. At that point, the keyword *phenomenology* is in the need of giving its place to its equivalent term, which is "meaning". That is to say, in order to obtain the dissertations related to the field of phenomenology for the decades before 1980s, the study employs the keywords in database as "meaning", "architectural body" and "spatial experience".

Between the decades 1960s and 1980s, *phenomenology* does not exist as a term in architectural researches limited to doctoral dissertations. Whereas dissertations become to appear after 1980s as in *Graph 1*, database does not bring any results for the preceding years. According to the results ProQuest brings with the keywords of "phenomenology", "architectural body" and "spatial experience, there are 26 dissertations in 1980s, 115 dissertations in 1990s, 264 dissertations in 2000s and 252 dissertations in 2010s. On the other hand, at the point where *meaning* takes the place of phenomenology as a search term, the results come to visible for the decades before as in *Graph 2*. This is a considerable result because of showing that the studies based on the subject on *meaning* become to benefit from the knowledge of a different discipline after 1980s. As a result of this finding, a significant change appears on the main term of the research field with the new term adopted from philosophy, which is *phenomenology*. Although the database finds no dissertations for 1960s, ProQuest brings 4 dissertations for 1950s and 35 dissertations for 1970s with the equivalent term of *phenomenology*. It means that, the field of phenomenology appears in architectural research as a philosophical study after the 1950s with the term of *meaning*.



Graph 1. The numbers of dissertations in architecture according to the decades, with the keywords of *phenomenology, architectural body and spatial experience*



548

Graph 2. The numbers of dissertations in architecture according to the decades, with the keywords of *meaning, architectural body and spatial experience*

For the 1950s, the study reaches 4 dissertations, one of which is also the first dissertation studying directly the phenomenology issue in architecture. Although there is actually another dissertation completed in 1952, this study does not directly establish a satisfying connection as the dissertation in 1957. To put in other words, in *"Water and Architecture"*, which is the doctoral dissertation of Charles Willard Moore (1957), architectural research especially adopts from the philosophy of Gaston Bachelard. Bachelard's book *"L'Eau et les Rêves"* (*Water and Dreams*), which was written in 1942, was used as a main

source in Moore's dissertation. In order to reveal the effects of water on Man, the physical nature of water is approached as both a form and an expression. Within a philosophical point of view, this dissertation clearly constructs a special structure on architectural phenomenology by following the traces of *meaning* on space through water as an element of architectural composition and the emotional experience it provides. That is to say, because of grounding on a philosophical framework in the process of generating a knowledge belonging to architecture, architectural research has not a limited structure any longer that is closed within the borders of its pure discipline. It means that, the knowledge of architecture is in tendency to reach to the fields of other studies that supports the development of new directions in discipline, such as *architectural phenomenology*. Moreover, such an approach in scientific research especially requires to look from an epistemological perspective in order to understand the nature of knowledge.

To discover the epistemological positions, for example of the dissertations in 1950s, to decipher the nature of the knowledge in research field appears primarily as a requirement. It means that, through the main questions which structure the theory of knowledge, a research field basically consists of various directions in a number of ways. Through these questions that structure the theory of knowledge, objective, subjective and constructive aspects of epistemology exist within the epistemological continuity. As seen in the book of *"The Social Construction of Reality: A Treatise in the Sociology of Knowledge"*, Peter L. Berger and Thomas Luckmann (1966/1991) introduces the term "social construction" in addition to "objective reality" and "subjective reality" when discussing the knowledge of social sciences. Even though there are different kinds of perspectives acknowledged, the other approaches in research process generally fall under these three main epistemological positions. In addition, these different kinds of positions also stem from major distinctions in both theoretical perspectives and methodologies. As can be seen in *Table 2*, the dissertation completed in Columbia University, which is titled *"Mediaeval Monastic Planning: Its Origins in the Christian East and Later Development in Western Europe"* (Sowers, 1952), bases on a constructivist epistemological ground. Because, this dissertation intends to make a discussion on the relationship between the monastic life and the medieval architecture especially by connecting the elements of spiritual life with physical structures of architecture. The other dissertation, which is titled *"Water and Architecture"* (Moore, 1957), discusses meaning issue in architecture by using a case study as the methodology. Because this is an interpretive approach of water and its meaning for architecture through the philosophy of Gaston Bachelard, it is possible to say that architectural research constructs an alternative knowledge at the intersection of the philosophical and the architectural field. In a similar way, a constructive perspective is also seen on the dissertation

completed in 1958, which is "*Rodrigo Gil De Hontanon: His Work and Writings, Late Medieval and Renaissance Architecture in Sixteenth Century Spain*" (Hoag, 1958). Using a heuristic inquiry, this dissertation clearly tries to develop an interpretation between the geometric forms of exterior masses and the characteristics of their interior spaces especially within the context of the late Medieval methods. Through mystic spaces and the spiritual experiences they produce, such an approach is on revealing the character issue of architecture. As a result of all these dissertations, 1950s is defined as the beginning of the constructivist epistemology for the phenomenological field in architectural research through generally an interpretivist theoretical perspective.

Table 2. The analysis of the architectural dissertations database brings for 1950s

DECADE	KEYWORDS	NUMBER OF DISSERTATIONS	SOURCE	EPISTEMOLOGY	THEORETICAL PERSPECTIVE	METHODOLOGY / METHODS	ANNOTATIONS
1950s	Phenomenology / Meaning Architectural Body Spatial Experience	4	Ossa Raymond Sowers. (1952). <i>Mediaeval Monastic Planning: Its Origins in the Christian East and Later Development in Western Europe</i> , Doctoral Dissertation, Columbia University.	Constructivism	Interpretivism	Heuristic Inquiry	-relationship between ... <u>monastic life</u> and <u>mediaeval architecture</u> - <u>monastic planning</u> ... according to <u>the monastic experience</u> -physical structures for ... spiritual life
			Charles Willard Moore. (1957). <i>Water and Architecture</i> , Doctoral Dissertation, Princeton University.	Constructivism	Interpretivism	Case Study Heuristic Inquiry	- <u>water</u> as an element of architectural composition (for an <u>infinite space</u>) (for richness and depth) that will give <u>meaning</u> -as a form ... and ... as an expression <u>the physical nature of water</u> <u>the effects of water on Man</u> -an <u>emotional experience</u> -two proposals for two sites
			John Douglas Hoag. (1958). <i>Rodrigo Gil De Hontanon: His Work and Writings, Late Medieval and Renaissance Architecture in Sixteenth Century Spain</i> , Doctoral Dissertation, Yale University.	Constructivism	Interpretivism	Case Study Heuristic Inquiry	- <u>the character</u> of architecture especially in ... late medieval methods - <u>the characteristic</u> of <u>interior</u> space through ... <u>exterior masses</u> ... <u>geometric forms</u> for ... <u>emotional, mystic spaces</u> ... <u>spiritual experiences</u>

As mentioned before, ProQuest database finds no dissertations for 1960s. Instead of that decade, this study prefers to analyze also the 1950s. As in *Table 3*, throughout the years between 1970 and 1979, there is a continuity in epistemological positions as constructivist epistemology as in previous periods. In the dissertation titled "*Social and Political Theory in Modern Architecture: A Study of Frank Lloyd Wright and Le Corbusier*" (Milne, 1975), the research is based on an interpretivist approach. Using both a heuristic inquiry and a discourse analysis, this dissertation develops a critical inquiry on human experience and its sensory meaning in architecture. On the other hand, the dissertation, which is "*Way-Finding in the Built Environment: A Study in Architectural Legibility*" (Weisman, 1979), uses hermeneutics as the methodology of interpretation. In addition to progress with a case study, which is based on the impact of physical design and its psychological reactions through specifically chosen ten university buildings, the research is actually an empirical study especially on human sciences. The other dissertation, which is completed in the late 1970s in Rice University by Ahmet Vefik Alp (1979), also follows a similar philosophical outlook to other studies. Within a physical environment, the study titled "*Aesthetic Response to Geometry in Architecture*" (Alp, 1979) searches for the emotional and aesthetic potentials of the geometrics of architecture especially on the human perception. By tracing psychological considerations of architecture within the man-environment system, this study also maintains constructivism as the epistemology. Like the previous dissertations, there is an attempt to reach beyond the established knowledge of discipline by not only interpreting the existing ground but also constructing new approaches through a philosophical perspective on the body of knowledge of architecture.

Although none of them directly uses the term of phenomenology itself, all dissertations completed in 1970s are in tendency to adopt its point of view from the field of philosophy. However, it is not very possible to claim an evident phenomenological perspective or actually a direct adoption of the theories of any philosophical phenomenology in architectural research for the years before 1980s contrary to the dissertations completed in later periods. It means that, the scientific studies of these decades come together around a more hidden understanding through *meaning* that actually forms the foundations of *phenomenology* in architecture, which is emerging after the periods of 1980s.

Table 3. The analysis of the architectural dissertations database brings for 1970s

DECADE	KEYWORDS	NUMBER OF DISSERTATIONS	SOURCE	EPSTEMOLOGY	THEORETICAL PERSPECTIVE	METHODOLOGY / METHODS	ANNOTATIONS
1970s	Phenomenology / Meaning Architectural Body Spatial Experience	35	David Alvin Milne. (1975). <i>Social and Political Theory in Modern Architecture: A Study of Frank Lloyd Wright and Le Corbusier</i> , Doctoral Dissertation, University of Toronto.	Constructivism	Interpretivism	Heuristic Inquiry Discourse Analysis	<ul style="list-style-type: none"> - on social and political theory (with philosophical principles) - the city planning ideas of... Frank Lloyd Wright and Le Corbusier - a critique of naturalism - human experience & sensory experience
			Gerald David Weisman. (1979). <i>Way-Finding in the Built Environment: A Study in Architectural Legibility</i> , Doctoral Dissertation, University of Michigan.	Constructivism	Interpretivism Hermeneutics	Case Study Heuristic Inquiry	<ul style="list-style-type: none"> - orientation and way-finding within buildings - the impact of physical design psychological reactions "physical design characteristics" - an empirical study on environmental legibility within ten university buildings - a theoretical discussion the impact of psychological variables to objective physical features
			Ahmet Vefik Alp. (1979). <i>Aesthetic Response to Geometry in Architecture</i> , Doctoral Dissertation, Rice University.	Constructivism	Interpretivism Hermeneutics	Case Study Heuristic Inquiry	<ul style="list-style-type: none"> - psychological considerations of architecture "man-environment" system - physical environment - visual (human) perception - experiential aspects of architectural surroundings - emotional and aesthetic potentials of... the geometrics of architecture (and their effects) - an experimental research (through a literature analysis) a comparative analysis

After 1980s: Phenomenology as an Emerging Term in Architecture

The evolution of the term *meaning* to the term *phenomenology* is the result of directly associating architecture with the knowledge of philosophy. The dissemination of the phenomenology field in architecture starts with the studies of Christian Norberg-Schulz, who adopts Martin Heidegger's philosophy to architecture. However, while

the studies of Norberg-Schulz after 1980s prioritizes the term of "meaning" as in *"Intentions in Architecture"* in 1963 and *"Existence, Space and Architecture"* in 1971, the term "phenomenology" began to appear in the studies at the end of 1970s as in *"Genius Loci: Toward a Phenomenology of Architecture"* in 1979. So, it is expected that the effect of such a transformation reflects to other studies completed only after 1980s. Similar approaches continue by combining the other philosophies, for example of Edmund Husserl and Maurice Merleau-Ponty, with architecture discipline by some architectural phenomenologist such as Steven Holl, Juhani Pallasmaa and Alberto Perez-Gomez. This is an invasion of the knowledge to the research fields of other disciplines. As in *Chart 1* (in which "Other Studies" actually represents the sum of all other disciplines' dissertations except the first nine study fields), although phenomenology issue is primarily the subject of philosophy in 1980s and 1990s, this knowledge begins to enter to the fields of other disciplines after 1990s by leaving the philosophy behind.

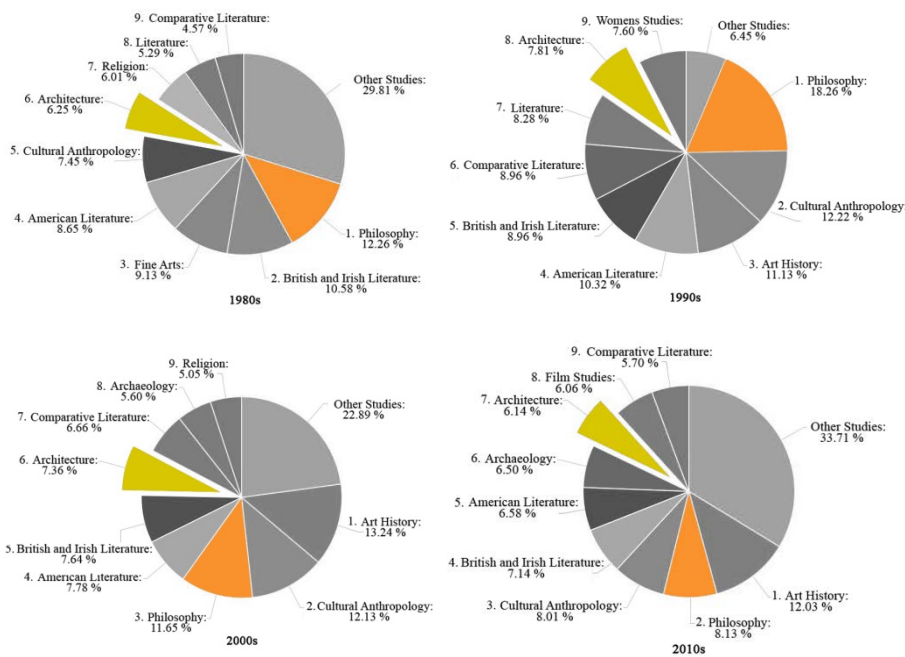


Chart 1. The distribution of research on phenomenology in architecture among other fields from 1980s to 2010s

Table 4. The distribution of research on phenomenology in architecture among other fields from 1980s to 2010s

DECADE	ALLSTUDIES	ARCHITECTURE FIELD	FIRST 9 STUDY FIELDS	OTHER STUDY FIELDS	% (ARCHITECTURE)
1980s	416	26	292	124	6.25
1990s	1473	115	1378	95	7.81
2000s	3587	264	2766	821	7.36
2010s	4106	252	2722	1384	6.16

Being influenced by philosophical phenomenology, the research of *architectural phenomenology* begins to appear, especially with this specific term in architectural research field, with the 1980s and 1990s that actually constitutes a study base for later periods, which is illustrated in *Graph 1* before. Mennan (2006, p.67) points out this transfer of knowledge between different disciplines by stating that "the late '80s and early '90s witnessed an increasing interest in interdisciplinary studies, this manifestation of a new intellectual and discursive spirit, blurring disciplinary frontiers". A significant part of this new discursive spirit is also phenomenological researches in these decades in architecture. As in *Table 5*, for example, the dissertation titled "*Interpreting the Dialogue between Man and Architectural Form, as a Means for Constructing a Third and a Unifying Element between Them*" (Albayaty, 1983) clearly constructs its structure with a phenomenological view by attempting to decipher the dialogue between material form and the spiritual order of man. Although *phenomenology* arises as a term, researches on *meaning* reach a very high level in these two decades. Additionally, another dissertation, which is "*Semiotics and the Discourse of Architecture*" (Walker, 1987), searches for meaning within a semantic view through phenomenological research method. In a similar way, the other dissertation titled "*Inside Children's Place: A Phenomenological Study of the Social-Spatial Worlds of Thai Daycare Centers*" (Patumanon, 1989), which is completed in University of Michigan, uses the same methodology as phenomenological research. Through a sensitive observation on a philosophical ground, this study bases on searching a meaningful place to dwell for children. Moreover, to focus on *meaning* issue continues during the 1990s as a research trend in architecture. A study, which is completed at the beginning of the 1990s (Mansour, 1990), for instance, discusses this issue within the framework of an exploratory case study. Heuristic inquiry is mostly preferred as methodology that mostly attempts to decipher meaning through theoretical texts, such as in another study (Buechi, 1991) in early 1990s. Using phenomenological hermeneutics, this dissertation discusses the meaning and the role of buildings in the life of people. Similarly, the dissertation titled "*A Phenomenological Inquiry into the Problem of Meaning in Architecture*" (Jongkeun, 1994) also keeps this privileged research subject in its approach within a constructivist epistemology such as the previous dissertations. As a result, all these determinations proves the existence of a continuity for these two decades in their contents, methodologies, theoretical perspectives and epistemologies.

Table 5. The analysis of the architectural dissertations database brings for 1980s

DECADE	KEYWORDS	NUMBER OF DISSERTATIONS	SOURCE	EPISTEMOLOGY	THEORETICAL PERSPECTIVE	METHODOLOGY / METHODS	ANNOTATIONS
1980s	Phenomenology Architectural Body Spatial Experience	26	Muthana Jamal Albayaty. (1983). <i>Interpreting the Dialogue between Man and Architectural Form, as a Means for Constructing a Third or a Unifying Element between Them</i> , Doctoral Dissertation, University of Pennsylvania.	Constructivism	Interpretivism Hermeneutics	Phenomenological Research Case Study	- a unifying element ... as a balance between man and form - man ... as an individual a part of society - form ... as an individual spaces between buildings - architecture is both... a material form and the spiritual order of man (with a phenomenological view) - a case study to interpret two urban fabrics (shared spiritual values in culture)
			Paul Joseph Walker. (1987). <i>Semiotics and the Discourse of Architecture</i> , Doctoral Dissertation, The University of Auckland.	Constructivism	Interpretivism Hermeneutics	Phenomenological Research Heuristic Inquiry	- "meaning" of architecture - a semantic view - "semiotics" in architecture - semiotic concepts / paradigms ... in architectural discourse - to construct a semiotic model through "language" in architecture (with theoretical texts)
			Tipsuda Patumanon. (1989). <i>Inside Children's Place: A Phenomenological Study of the Social-Spatial Worlds of Thai Daycare Centers</i> , Doctoral Dissertation, University of Michigan.	Constructivism	Interpretivism Phenomenology	Phenomenological Research Case Study	- "meaning" of architecture - a place to dwell (experience, soul, spirit, genius loci) - meaningful architecture for children - a place like a home ... - a philosophical ground for study - a case study on three local spaces ... through a sensitive observation

To focus on *meaning* issue continues during the 1990s as a research trend in architecture. In Table 6, the dissertation titled "*The Language of Design: Conceptual Interpretations*", which is completed at the beginning of the 1990s (Mansour, 1990), for instance, discusses this issue within the framework of an exploratory case study. Heuristic inquiry is mostly preferred as methodology that mostly attempts to decipher meaning through theoretical texts, such as in another study (Buechi, 1991) in early 1990s. Using phenomenological hermeneutics especially from Heidegger, this dissertation, which is on "*Interpreting Buildings as Interpretations: Towards a Hermeneutics of Building*", discusses the

meaning and the role of buildings in the life of people. Similarly, the dissertation titled "*A Phenomenological Inquiry into the Problem of Meaning in Architecture*" (Jongkeun, 1994) also keeps this privileged research subject in its approach within a constructivist epistemology such as the previous dissertations. As a result, all these determinations especially prove the existence of a continuity for these two decades in their contents, methodologies, theoretical perspectives and epistemologies.

Table 6. The analysis of the architectural dissertations database brings for 1990s

DECADE	KEYWORDS	NUMBER OF DISSERTATIONS	SOURCE	EPISTEMOLOGY	THEORETICAL PERSPECTIVE	METHODOLOGY METHODS	ANNOTATIONS
1990s	Phenomenology Architectural Body Spatial Experience	115	Yasser Mohamed Mansour. (1990). <i>The Language of Design: Conceptual Interpretations</i> , Doctoral Dissertation, University of Michigan.	Constructivism	Interpretivism Hermeneutics	Heuristic Inquiry Case Study (exploratory) Participant Observation & Interview	- "meaning" ... as the center of the "language" a descriptive language - a participant observation among a group of designers in a design activity - interviews with participants - a conceptual interpretation of the language of design language of images language of sketches
			Georg Buechi. (1991). <i>Interpreting Buildings as Interpretations: Towards a Hermeneutics of Building</i> , Doctoral Dissertation, University of California.	Constructivism	Interpretivism Hermeneutics	Phenomenological Research Heuristic Inquiry	- the role of buildings ... in the life of people hermeneutics of building - to use phenomenological hermeneutics (as the main foundation of study) (especially from Heidegger) - readings on... Foucault, Benjamin, Gadamer - to analyze as interpretation
			Lee Jongkeun. (1994). <i>A Phenomenological Inquiry into the Problem of Meaning in Architecture</i> , Doctoral Dissertation, Georgia Institute of Technology.	Constructivism	Interpretivism Phenomenology	Phenomenological Research Heuristic Inquiry	- "meaning" in architecture (a phenomenological account) being ... phenomenal body the essence of architecture "lived experience" - a critical discussion on architectural meaning - a reinterpretation of the meaning of space

556

With the late 2000s, interests on phenomenology grows in architecture by emerging a new approach. While the knowledge of philosophical phenomenology is employed to search for meaning in architecture in 1980s and 1990s, a new trend is developed after 2000s, which directly criticizes the theories of phenomenology itself. This is obviously the

science model of Karl Popper that falsifies the fundamentals to construct an alternative knowledge. Because, as Lakatos (1970, p.93) states, the Popperian approach is based on "criticism of the dominant theory and proposals of new theories". In *Table 7*, for example, a dissertation completed in 2007, which is "*The Deposition of the Body: Architecture and Corporal Limits*" (Fitzsimons, 2007), appears as a discourse analysis on the theories of Alberto Perez-Gomez, Michel Foucault, Beatriz Colomina and Michel de Certeau. By analyzing architectural texts of these theorists, this study clearly attempts to explore the situated meaning of body in order to construct a new discourse afterwards. In a similar way, another study, "*The Architecture of the Poetic Image: The Visible and the Invisible in the Sacred Architecture of Sigurd Lewerentz*" (Patterson, 2009), makes a phenomenological reading by making use of the text of Merleau-Ponty (1964/1968), "*The Visible and the Invisible*". Through such a reference, this study deals with meaningful experience and poetic images in architecture. In another dissertation titled "*Architectural Theory and Practice, and the Questions of Phenomenology*" (Shirazi, 2009), there is a similar critical examination on theoretical texts. In order to develop a phenomenological interpretation of architectural buildings, Shirazi attempts to make an analyze of phenomenology issue from the philosophical ground through Husserl, Heidegger and Merleau-Ponty to the architectural ground through Christian Norberg-Schulz, Juhani Pallasmaa, Kenneth Frampton and Steven Holl.

In addition to 2000s, a similar methodology on phenomenological researches continues during the 2010s. As can be seen in *Table 8*, the dissertation completed in 2001 (El-Antably, 2011), which is titled "*Experiencing the Past: The Virtual (Re)Construction of Places*", aims to discover the meaning of place through formal and sensory qualities of historic places. In order to put forward a critical inquiry, an analysis on architectural literature is progressed in another study, which is "*Architectural Space: In Search of Sensory Balance for Contemporary Spaces*" (Watford, 2013). This dissertation generally makes a discussion on why vision is the sole sensory element in architecture. Similarly, the dissertation titled "*Body, Soul and Architecture: A Study of the Premodern Islamic and Western Traditions*" (Hajamaideen, 2014) constructs an interpretive reading on history of body and architecture. This study uses discourse analysis as methodology from the philosophical texts of Husserl, Heidegger and Merleau-Ponty to architectural theories of Norberg-Schulz, Pallasmaa, Frampton and Holl. Unlike the science model of Thomas Kuhn (1962/1970, p.23) that is based on "an accepted model or pattern", all these understandings are far from protecting the central theories. Constructivist epistemology provides an evolutionary model that generates lots of post phenomenologies from Husserl to Deleuze with a hermeneutics.

Table 7. The analysis of the architectural dissertations database brings for 2000s

DECADE	KEYWORDS	NUMBER OF DISSERTATIONS	SOURCE	EPISTEMOLOGY	THEORETICAL PERSPECTIVE	METHODOLOGY / METHODS	ANNOTATIONS
2000s	Phenomenology Architectural Body Spatial Experience	264	Juan Kent Fitzsimons. (2007). <i>The Deposition of the Body: Architecture and Corporal Limits</i> , Doctoral Dissertation, Rice University.	Constructivism	Interpretivism Critical Inquiry	Heuristic Inquiry Discourse Analysis	- "body" ... as a living flesh (contrary to ... numb ... immobile ... dead) - in order to understand... " <u>body's motion and sensation</u> " - to explore the situated meaning of "body" - to analyze architectural texts (Perez-Gomez, Foucault, Bolomina, de Certeau)
			Paula Anne Patterson. (2009). <i>The Architecture of the Poetic Image: The Visible and the Invisible in the Sacred Architecture of Sigurd Lewerentz</i> , Doctoral Dissertation, University of Washington.	Constructivism	Interpretivism Hermeneutics	Phenomenological Research Heuristic Inquiry Case Study	- " the issue of meaning " ... in architecture <u>meaningful experience</u> <u>poetic images</u> - a phenomenological reading using the text as a guide <u>the visible and the invisible...</u> by <u>Merleau-Ponty</u> examining <u>sacred architecture</u> <u>cemeteries, chapels, churches...</u> by <u>Lewerentz</u>
			Muhammedrez a Shirazi. (2009). <i>Architectural Theory and Practice, and the Questions of Phenomenology</i> , Doctoral Dissertation, Brandenburg University of Technology.	Constructivism	Interpretivism Hermeneutics	Discourse Analysis Phenomenological Research Case Study	- " phenomenology " issue... in the field of... <u>architectural theory and practice</u> (to capture the essence of things) - to analyze the term/discourse from philosophy <u>Husserl, Heidegger, Merleau-Ponty to architecture</u> <u>Norberg-Schulz, Pallasmaa, Frampton, Holl</u> - to interpret architectural buildings (a phenomenological interpretation) - (from Tadao Ando)

Table 8. The analysis of the architectural dissertations database brings for 2010s

DECADE	KEYWORDS	NUMBER OF DISSERTATIONS	SOURCE	EPISTEMOLOGY	THEORETICAL PERSPECTIVE	METHODOLOGY / METHODS	ANNOTATIONS
2010s	Phenomenology Architectural Body Spatial Experience	252	Ahmed Hamed El Antably. (2011). <i>Experiencing the Past: The Virtual (Re)Construction of Places</i> , Doctoral Dissertation, University of California.	Constructivism	Interpretivism Phenomenology	Heuristic Inquiry Case Study (exploratory) Participant Observation & Interviews	- to discover... "the meaning of place " (according to different context) Phenomenology in architecture - "a semantic analysis " to generate virtual spaces " reconstruction " of historic places (by using computational technology) - a case study is perceived to a group of users [formal and sensory qualities of space ... " body "...] - to analyze " qualitative data "
			Rebecca Ruth Watford. (2013). <i>Architectural Space: In Search of Sensory Balance for Contemporary Spaces</i> , Doctoral Dissertation, California Institute of Integral Studies.	Constructivism	Interpretivism Critical Inquiry	Heuristic Inquiry Discourse Analysis	- " vision " ... the sole sensory element in architecture (depreciation of the sense) the role of sensory experience (human & nature) - analysis of... architectural examples architectural literature from modern architecture - a critique on... industrial modern world technological progress
			Faris Hajamaideen. (2014). <i>Body, Soul and Architecture: A Study of the Premodern Islamic and Western Traditions</i> , Doctoral Dissertation, The University of Adelaide.	Constructivism	Interpretivism Hermeneutics	Phenomenological Research Discourse Analysis	- a reading on ... " history of body and architecture " " body " as ... of the human / the building / settlement / city " soul " as ... intangible ruler of the body - interpretations on theoretical & mystical texts (Vitruvius, Alberti... Farabi, Ibn Arabi) through Philosophy - (Perez-Gomez, Pallasmaa, Heidegger, MerleauPonty)

CONCLUSION

Research field of a discipline acts as an extensive ground, which embraces a comprehensive knowledge of its discipline. This knowledge includes nearly all theoretical and practical approaches of the subject. In a similar way, architecture discipline also has the same nature in its research process. And so, to analyze its nature of knowledge through major questions and then to decipher the structure of the knowledge of its study field epistemologically appears as a requirement in architectural research.

In this study, it is attempted to draw a genealogy of a specified area of study in architecture, which is *phenomenology*. Analyzing some doctoral dissertations within particular periods, this study is actually an inquiry on whether *architectural phenomenology* is a "research trend" or not. As a result, architectural phenomenology appears as a privileged subject in architectural research according to the spirit of the periods in science. Adopting from other discipline, which is the field of philosophy, this research area generates new forms of knowledge within the discipline of architecture. It means that, this research is "a closer examination of the relationship between epistemology and the research process" (Feast and Melles, 2010).

The results show that there are some significant changes especially in the keywords of architectural phenomenology in certain decades. While *meaning* term had been used in phenomenological approach based studies before 1980s, *phenomenology* appears as the favored term after 1980s. Especially with the late 2000s, architectural phenomenology begins to be a privileging research area. As a result of being a research trend, a sub-field emerges after 2000s that directly criticizes the theories of phenomenology itself, which is *post-phenomenology*. Additionally, from 1950s up to the present, there is continuity in epistemological positions of dissertations for each decade as constructivism. However, different methodologies emerge in different periods especially as before 1980s, between 1980s and late 2000s and after 2000s. But, all approaches exist on a common theoretical ground, which is interpretivism. To see a genealogy of the keyword itself from meaning to phenomenology provides to position this philosophical field in architectural research.

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Resume

Benan Dönmez was born in 1988 in Bandırma. She graduated from Mersin University Faculty of Architecture in 2011 as the first of faculty. She received M.Arch degree from Gazi University Faculty of Architecture in 2015. She currently has been studying for Ph.D. in Architecture at Middle East Technical University. She also has been working as a research assistant at Hatay Mustafa Kemal University, Department of Architecture since 2018.