AN ONTO-EPISTEMIC INQUIRY REGARDING MEMORY AND COUNTER-MEMORY OF MODERNIST ARCHITECTURE: DEFECTS AND FUTILITY AGAINST NORMS AND CAUSALITY (1)

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INTRODUCTION: STUDY ORIENTATION AND OBJECTIVES

This research is a critical inquiry of the ontological and epistemological status of Modernist Architecture, and is based on the argument that such an inquiry can be made by directing to Modernist Architecture's memory and counter-memory. The central hypothesis is that, in addition to having a memory, Modernist Architecture also possesses a counter-memory; it actualizes itself through norms and causalities accumulated in its memory. However, it also possesses defects and futilities, and even though it cannot actualize itself through them, they continue to accumulate in the counter-memory of Modernist Architecture. Counter-memory is a repository of the rejected, deprived, suppressed, and deferred qualities of Modernist Architecture, and exposes them in the late modern period. Norms and causality constitute a set of epistemes which encompass the agreed upon characteristics capable of validating Modernist Architecture at any given time, whereas defects and futility represent a distinct set of counter-epistemes that encapsulate the singular, intuitive, heretical, and anomalous characteristics of Modernist Architecture. The aim of this research is to develop a methodology that allows for the appraisal of Modernist Architecture from both sets and, through this methodology, present a fallibilistic possibility for modernist architectural theory. To achieve this goal, the research is transformed into a research program framed by Imre Lakatos' methodology of research programmes. Within this program, the ontological and epistemological status of Modernist Architecture is examined through three categories: form, function, and meaning. In these categories, traces of norms and causality in the memory of Modernist Architecture, as well as traces of defects and futility in its counter-memory, are investigated.

Among all the modern architectural practices that developed at the end of the 19th century and rejected historicism, the Modernist Architecture occupied the most dominant position after 1920 with its rationalist,

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functionalist and purist attitude. According to architectural historian Adrian Forty (2000), the Modernist Architecture becomes a recognizable system of language established with scientific concepts in the first half of 20th century. As of 1968, its functionalized norms and instrumentalized causalities begin to disintegrate with intense criticism from the avant-garde generation. In this research, modernist architectural object is considered to embody and exemplify the Modernist Architecture's epistemes in the three examined categories. In the methodology section of the article, these epistemes are characterized by the following qualities of the modernist architectural object: Its existence is conditioned by the mind and causality; it is detached from subjective meanings; it is radically functional in purpose; and its form is determined by a part-to-whole relationship. On the other hand, the modernist architectural object of counter-memory rejects the aforementioned qualities. It is non-functional; it is signified by the subject; and, it is an undefined whole where parts come together in an ordinary manner.

The desire to inquire into Modernist Architecture within a framework of holistic criticism is inspired by Michel Foucault's conceptualization of counter-memory. In his book "Language, Counter-memory, Practice: Selected Essays and Interviews", Foucault (1977) conceptualizes counter-memory as a concept that expresses history of otherness such as violence, transgression, death and finitude. Although it may seem a superficial form of negation, Donald Bouchard (1977), who authored the introduction to the book, defines it as an action that affirms particularities and allows for emergence of new practices drawing on the contributions of Michel Foucault, Friedrich Nietzsche and Gilles Deleuze. Foucault's understanding of history differs from the traditional linear view of history. He distinguishes history's discontinuities (such as accidents, breaks and interruptions) from its unchanging truths, established values and transcendent structures. Thus, the integrity and coherence of history are disintegrated from memory revealing hidden heterogeneities in a repressed event, an abandoned practice or a forgotten desire through counter-memory.

According to the critic Royston Landau (1981), Foucault traces the dissonances, disruptions and inconsistencies that he believes have always existed in cultural history. According to Foucault, it is never possible to assemble all the pieces (or to create a whole picture), but it is not intellectually disreputable to accept that history is full of inconsistencies, discontinuities and disruptions. In this context, he objects to historical methods that focus on unificationism, as they attempt to tell a well rounded-off story in order to create order through unificationism. This effort may lead to ignoring or suppressing differences. However, Foucaultian historical research should be about difference and contradiction.

Historian Paul Veyne (1997) states that Foucaultian history is not structured according to centuries or peoples but according to practices rejecting central and hierarchical historiography. Similarly, Manuel DeLanda (2000) explores the possibility of a history without linear causality or equilibrium in his book "A Thousand Years of Nonlinear History". He argues that history is not a narrative of necessities but rather a narrative of contingencies and missed opportunities. His conception of missed opportunities describes the fragile discontinuities of history, similar to Foucault's heterogeneities.

Another conceptualization to provide space for thoughts triggering unstructured and unrecognized actions appears in an allegory by Michael Hays: "*In the conscious act of forgetting, one cannot but remember* (Hays, 2010, 71)". This suggests that what is suppressed to be forgotten is not assimilated by discipline, but waits in counter-memory as a marginal potential until it is triggered, even if it is late and incomplete. According to Hays, this potential has been triggered by architecture's Big Other since 1970. The Big Other is a conception that includes defective and insufficient aspects of architecture, and has been activated by a group of architects, including Aldo Rossi, Peter Eisenman, John Hejduk, Bernard Tschumi and Rem Koolhaas. Hays refers to this group of architects as the late avant-garde. The Big Other—waiting in counter-memory—is the form architecture takes when faced with the threat of self-termination. According to Hays, because architecture from 1970 onwards refuses to be useful, to perform well and to comply with cultural expectations, its contradictions, discontents, and unhappy consciousness should be investigated.

As in Foucault's construction of history, which disrupts its continuity and dismantles its traditional foundations, Eisenman (2008) states that the task of history is to make contradiction and discontinuity visible. Based on his statement, Eisenman attempts to reveal contradictions and formal discontinuities in modernism in his book "Ten Canonical Buildings". Rather than presenting a canon that is worth preserving, conservative, universal and timeless, he introduces idea of a canon that reveals the transgressive concepts of postmodernism. He defines the canonical as liberating the divergence of architecture that emerges in seemingly unimportant but marginal moments. According to Stan Allen (2008), the author of the book's foreword, counter-memory is a concept that encompasses the perverse and transgressive nature of Eisenman's approach.

METHODOLOGY: ONTO-EPISTEMIC INQUIRY

The research presented in this article, which aims to discuss the ontological and epistemological status of Modernist Architecture, is framed around Imre Lakatos' methodology of research programmes. Lakatos (1970) bases this methodological approach on a sophisticated version of naive falsification, originally developed by Karl Popper. In this version, the idea that a theory's consistency is achieved solely through its confirming premises is criticized. That is, incorrect conclusions cannot be derived from correct premises—if they were, the theory would already be falsified. However, correct conclusions can still be derived from empirical premises. Therefore, rather than looking at where a theory succeeds through verification, one must focus on where it fails through falsification, since reliable knowledge lies where the theory has failed. In the Popperian sense, scientific growth is possible by pursuing inconsistencies between theory and anomalies and by constructing falsifiable theories.

The research programme proposed by Lakatos (1970) is comprised of two methodological rules: the negative heuristic and the positive heuristic. The negative heuristic defines what must be preserved within a research programme, while the positive heuristic determines its refutable variants. The negative heuristic constitutes the hard core of the research programme. The hard core is the background knowledge that is accepted as unproblematic throughout the research programme and is methodologically irrefutable, as it is protected by a

surrounding protective belt. This protective belt is constructed using the positive heuristic of the research programme. The key principle here is to ensure that reasoning is directed to the auxiliary hypotheses put forward in the protective belt, and that the questioning is carried out through them. In this way, anomalies and counter-evidence are diverted away from the negative heuristic and instead incorporated into a research protocol within the auxiliary hypotheses. The auxiliary hypotheses are theoretically set up at the beginning of the research to defend the hard core; however, they can be repeatedly adjusted to reconcile with the evidence that emerges in later stages of the research, and even completely changed and eventually refuted if necessary.

Lakatos' methodology of research programmes, rooted in the post-positivist philosophy of science, was adapted into a framework for architectural inquiry in the 1970s. Royston Landau (1981) defines the power of the negative heuristic to shape the positive heuristic as the power of rejection. According to him, all avant-garde movements in architecture have emerged through this power. In a field like architecture, which falls outside the realm of natural sciences, Lakatos' methodology is promising as it proposes a conceptual model for evaluating complex connected events (Landau, 1982). In broad terms, the research programme provides an objective and methodological foundation for questioning whether a theory, or set of ideas should be preferred over another (Landau, 1982, 305). The inviolable statements in the research programme, which are not open to question, constitute its negative heuristic (Landau, 1981, 1982). On the other hand, the positive heuristic consists of an operational plan that guides the programme's pursuit of knowledge, which makes it possible to avoid getting lost in an ocean of anomalies (Landau, 1982, citing Lakatos, 1970, 135). The positive heuristic is so variable and abstract that the negative heuristic provides it with the necessary order (Landau, 1982, citing Lakatos, 1970).

Following Landau's Lakatosian interpretation of architectural research, Lakatos' methodology of research programmes was adapted to architectural design processes by Stanford Anderson (1984a). This adaptation, published in Design Studies in 1984, was accompanied by three additional articles illustrating how the methodology might function. One of these articles was written by Anderson himself (1984b), while the others were authored by Libero Andreotti (1984) and Vivianna Metallinou (1984). Anderson (1984a) emphasizes that, although these attempts do not operate under the full analytical apparatus of the methodology of research programmes, they provide an anticipation of the analytical potential of Lakatos' methodology. He examines architectural knowledge from a Lakatosian perspective and, through this lens, critiques the scientized design approach of Modernist Architecture. Anderson's criticism focuses on the historicist interpretations of this approach, which leave no room for indeterminacy in Modernist Architecture. Instead of perceiving the unforeseen or the unexpected as flaws, Anderson expresses his curiosity toward their investigation (Hernandez, 2018, citing Anderson, 1971).

This research, proceeding with the anticipation of Lakatos' methodology, is framed around a research program that activates the established norms and causality of Modernist Architecture in relation to its marginal defects and futility. Within this program, alongside a positivist epistemological framework, a post-positivist counter-framework is also established, where conjectures and refutations will be made. However, the designed

research program is not broad enough to conduct a full-fledged ontological inquiry of the Modernist Architecture. Instead, it is framed to engage the Modernist Architecture in a limited ontological inquiry. With this need for a limited yet systematic inquiry, the Modernist Architecture was encouraged to be perceived as a whole composed of separable, independent parts. However, necessitated the question of which theoretical framework could justify such separation. At this point, Anderson (1984), Landau (1981), and Hernandez (2018) paved the way for considering the production of architectural episteme as a cognitive process within this inquiry. Under their guidance, it was accepted that architectural episteme undergoes heuristic processes before it is fully formed, and this acceptance led this research to categorize the episteme of Modernist Architecture based on the processes through which it is produced.

This categorization, which is critical to the methodology of the research, progresses with the anticipation of Landau's (1981) set of rules regarding architectural production. Landau defines the position of an architecture in relation to others through formal, technological, ethical, and political rules or heuristics. Hernandez (2018) equates these heuristics with the architect's instruments and methods respectively: Formal heuristic of architecture includes the formal transactions in the generation of built environment; Technical heuristic of architecture covers the technical procedures used in the building; Communicative heuristic of architecture explores the ways in which architectural knowledge is communicated; and Utilitarian heuristic of architecture refers to the human actions in the built environment. Although this set of four is not directly adopted in the categorization of the inquiry conducted in this research, it provides an indirect anticipation. With this anticipation, Modernist Architecture is divided into three categories based on the heuristic processes through which its episteme is produced: the categories of form, function, and meaning. In other words, after undergoing heuristic processes, the epistemes of Modernist Architecture, which emerge through consensus, become recognizable and distinguishable within these categories through their respective objects.

After limiting the ontology of Modernist Architecture within the framework of functional, semantic, and formal heuristics, the norms and causality of Modernist Architecture are placed at the negative heuristic of the research program, referred to as its hard core. These constitute the epistemes of Modernist Architecture, which are considered undisputed, universally agreed upon, and capable of explaining the Modernist Architecture as correct at any given time. The epistemes represent superior knowledge of the Modernist Architecture in the relevant categories, and are placed in the following order. First, the episteme explaining that the object of Modernist Architecture has a clear and pre-conceived form is conceptualized as representation of object. Second, the episteme grounded in the Modernist Architecture's utilitarian origin is conceptualized as useful being. Third, the episteme narrating that the object of Modernist Architecture has a defined and intelligible meaning is conceptualized as self-referential icon. In Lakatosian terms, the truth value of these epistemes is not questioned. These are closed to intuition, falsification, and refutation.

On the other hand, the defects and futility that falsify the Modernist Architecture and therefore cast doubt on its truth value are placed in the positive heuristic of the research program, namely, its protective belt. Within this belt, the anomalous, exceptional, and flawed variants that

ONTO-EPISTEMIC INQUIRY			
CATEGORIES OF INQUIRY	NEGATIVE HEURISTIC; THE HARD CORE	POSITIVE HEURISTIC; THE PROTECTIVE BELT (THE AUXILIARY HYPOTHESES)	QUESTIONS THAT ACTIVATE HEURISTICS
	Norms and Causality in the Memory of Modernist Architecture *Epistemes	Defects and Futility in the Counter-Memory of Modernist Architecture *Counter-epistemes	
Form	Representation of object	Ordinariness of object	What is the potential expansion of Modernist Architecture that presents its thought, rather than representing itself through form?
Function	Useful being	Mediated nothingness	What remains of a useless modernist architectural object?
Meaning	Self-referential icon	Empty architectural index	If an architectural object is open to association and mediation in the signification process of the subject, could it be considered modernist?

Table 1. The design of the research program

are assumed to have accumulated in the counter-memory of Modernist Architecture are grouped under counter-epistemes. These counter-epistemes remain open to intuition and experience, and responsive to critique, falsification, and refutation. The counter-epistemes are assigned in order: The counter-episteme that falsifies the episteme of the object having a premeditated form is conceptualized as ordinariness of object, providing variants that render the object's form ordinary; The counter-episteme that criticizes the utilitarian origins of Modernist Architecture is conceptualized as mediated nothingness, exploring the possibilities of the futile use of the object; and the counter-episteme that refutes the episteme of the object's clearly legible meaning is conceptualized as empty architectural index, incorporating variants that seek possibilities for signification.

Finally, the objection procedure of the research program is initiated by posing a set of questions (See Table 1) that will activate heuristic processes in relation to the categories. In this way, the inquiry is directed towards the assumptions that relate epistemes to counter-epistemes—that is, the relationship between norms and causality with defects and futility—and is conducted within related discourses, diagrams, artworks, texts, and architectural projects. The inquiry seeks to discuss the ontological and epistemological status of Modernist Architecture and to explore its possibility as a fallibilistic theory.

The research program is outlined in **Table 1**.

CATEGORIES OF INQUIRY

Landau (1981) states that numerous positive rules can be put forward in the production of architecture, and that these rules can be diversified. While this makes the research of the production of architecture difficult, Landau asserts that this difficulty can be overcome with the concepts of heuristic power and architectural position. According to him, research should be done with reference to a particular position, because the whole being investigated is "*an open 'elusive' whole, sufficient to approximately limit a field of interest, but with a flexing boundary capable of accommodating modification* (Landau, 1981, 112)". While this whole allows for variation and interpretation, it nonetheless includes formal, technological, ethical,

and political rules. Equating Landau's four heuristics of architecture to the architect's instruments and methods (as mentioned in the methodology section of the article), Hernandez (2018) investigates form, technique, communication, and use/purpose in the production of architecture. Hernandez's alignment of Landau's heuristics provides the basis for how the whole inquired in this article could be broken down into parts, and the following three categories are included in the inquiry: form, function, and meaning.

Category of Form

The modernist architectural object is a formally rational whole, where parts are in a consistent and continuous relationship with each other. It is liberated from the burden of being an analogy of conditions of the context where it is located, and is controlled by rationalism. It is unanchored from probable ambiguities and diversities in context, and empiricism. It exists merely as its own possibility. Legibility in relationship between the parts and the whole, whose compositional organization is based on abstraction, is essential in construction of a modernist architectural object. This implies that the whole can be understood by comprehending the properties of its parts, which means that the whole is the sum of its parts. A modernist envelope which can be defined as a part-to-whole dialectic is created in this manner. Nothing conditions the whole except for its parts. According to Eisenman (1979), this is what Corbusier refers to as freedom. The object refers to formation process of itself, starting from the smallest part that constitutes its whole. Thus, it can have a form that is abstract, simple, and refined only to the extent that it can express its function, which aligns with the modernist notion of creating an objectivity that solely reveals reality (Eisenman, 1984a). While form becomes apparent and legible, thought becomes ordinary, and object turns into an object of representation. As a result, the episteme of this category is conceptualized as representation of object. This refers to a compositional whole from which no part can be removed, nor can a new part be added. This whole possesses the characteristic of being a form that solely references its function. Any variable that disrupts this abstract and ideal form and prevents it from signifying its function (such as ornamentation, material, or color) is eliminated from this episteme.

Indeed, Stanford Anderson states that from the 1930s to the 1950s, the Masters of the Modern Movement shared the idea of a "design object" – "*that is, in an object that receives its permanent form according to a clear, pre-visioned plan (Anderson, 1971, 71-73).*" However, such scientized design has not answered the question of how an artifact should receive its form and failed to question the metaphysics that underlie the design (Hernandez, 2018, citing Anderson, 1971). Eisenman (2008) suggests that this modernist dialectic of part-to-whole began to be criticized around 1968. According to him, the pre-1968 generation including figures such as Robert Venturi, Aldo Rossi and James Stirling first critiqued the formal coherence of Modernist Architecture through strategies of fragmentation and materiality. The post-1968 generation then sought alternatives to this dialectic by drawing upon structuralist and poststructuralist theories. In his book "The Architecture of the City", Aldo Rossi (1982) gives one of the early signs of deterioration of formal consistency in Modernist Architecture, revealing memory's effect on type, in the creation of form. He asserts that form can no longer embody its original function, that type is no longer a neutral structure in history, and that the understanding of typology should hence be transformed.

According to Rossi, this transformation can be achieved by transferring the type from the realm of history into that of memory. He displaces type from history in order to make a connection between place and memory. Accordingly, it becomes possible to erase history, detach from a specific time and a real place. Instead, he produces an abstract locus that exists in a purely typological or architectural time-place. This signifies a reconciliation between the modernist utopia of no place and the humanist reality of some place. According to Eisenman (1982), who authored the introduction to the book, Rossi gives the type-form a significance beyond its original function through memory. Type, thus, becomes an apparatus to constitute form. In this way, typology, previously used solely for classification, is employed as a catalyst for invention in the design process. In his book "Architecture's Desire: Reading the Late Avant-Garde", Hays (2010) explains that Rossi uses typology to grasp indeterminate conditions of architecture's possibility and to give form to that which brings architecture into being.

Eisenman (2008) examines Rossi's Cemetery of San Cataldo in Modena designed in 1971. According to him, Rossi's approach here is a critique of modernist form produced through part-whole relationships based on abstraction, along with the function that form carries, the meaning that function bears, and contextualism. Eisenman states that Rossi envisions type as a standard element that is independent of scale and meaningful only when understood in a specific context. On the one hand, since Rossi distorts scale by incorporating objects intended for domestic use into urban environment, he disrupts familiarity and manifestation of reality through the absurdity of scale. On the other hand, as Eisenman argues, he destroys the uniqueness of typological elements since he uses types based on Platonic forms by repeating them, minimizing them, and placing them in different contexts. Rejecting the classical conception of part-to-whole, Rossi disrupts the familiarity of objects by playing with their scale. Eisenman interprets change of scale and repetition of architectural elements in Rossi's cemetery design as an objection to the tradition of typology, and the singular reading of modernist object.

The utopian city put forward by Colin Rowe and Fred Koetter in their book "Collage City" published in 1978 can be exemplified as another effort of counter-memory. Kömez Dağlıoğlu (2016) argues that Popper's criticism of utopia and his exaltation of tradition are influential in the formation of Collage City in both methodological and socio-political contexts. While Popper rejects utopia by disbelieving that there is a ultimate true or ideal theory in science, he argues that scientific progress is only possible by continuing an earlier tradition (Kömez Dağlıoğlu, 2016, citing Popper, 2002a). According to Kömez Dağlıoğlu, Rowe and Koetter's aim in "Collage City"—to develop an urban design theory that reconciles tradition (the urban character of the traditional city) with utopia (the utopian component of the modernist city)—is also based on these thoughts of Popper. Their reconciliation is achieved again through Popper's thought of Piecemeal Social Engineering (Kömez Dağlıoğlu, 2016, citing Popper, 2002b, 42). This thought developed by Popper against the totalitarian holistic approach of social engineering gives rise to Rowe and Koetter's idea of piecemeal urban design in which architect plays the role of a social engineer. This is a design strategy against the totalistic and holistic approach of modernist planning (Kömez Dağlıoğlu, 2016). Through this strategy, Rowe and Koetter (1978) take architectural objects from different places out of their contexts, and bring them together in this imaginary city. According to them, the collage technique is a problem-solving strategy that allows interaction with utopia,

as it simultaneously uses things and disbelieves in them. In this strategy, each architectural object detached from its original context to have unique value. This value may relate to political, historical, folkloric, monumental or any other subject. Regardless of their origins, the architectural objects are brought together in the collage city through methods such as cross-breeding, assimilation, distortion, superimposition and conciliation driven by libertarian impulses. As such, they give the architectural objects the opportunity to determine their own destinies (Rowe and Koetter, 1978).

The approaches of Rossi, Rowe and Koetter discussed above bring this research closer to the realm of counter-memory of Modernist Architecture and to reasoning about its defects and futility. The antithesis of counter-memory arises with the question: What is the potential expansion of Modernist Architecture that presents its thought, rather than representing itself through form? The counter-episteme here is conceptualized as ordinariness of object. Contrary to the episteme of Modernist Architecture, the sum of the parts does not equal the whole, nor does it allow for predictions regarding the whole. Parts may not cluster in a consistent and continuous relationship, nor may they form a dominant whole. Part-to-whole relationship is not legible, as it is interrupted by shifts, bends, irregularities, discontinuities, displacements and superpositions. Here, object is detached from norms and causality that determine formal processes, and alienated from its own processes. While form becomes indistinct, object becomes empty and ordinary, yet thought becomes apparent. Object is no longer a representation, but instead requires understanding through its imperfections and futility, rather than its norms and causality. It possesses a content, and cannot represent its content through the primary aspects of its form. It begins to liberate its possibilities and present strategies regarding its internal structure. It now transforms into the trace of an event, or the presentation of a thought.

Category of Function

In his book "Architecture and Disjunction" (1996), Bernard Tschumi suggests that three possible sorts of correlations can be established between space and architectural program. The first correlation, reciprocity, refers to those that are indifferent to the spatial sequence (Tschumi, 1996, 159). The second correlation, indifference, explains those that reinforce the spatial sequence (Tschumi, 1996, 159). The third correlation, conflict, is related to those that work obliquely or against the spatial sequence (Tschumi, 1996, 159). Each of these correlations describes the relationship between space and event in different ways.

In the correlation of reciprocity, Tschumi presents a sequence in which space and architectural program become each other's conditions of existence. He evaluates the normative and reciprocal correlation revealed by this correlation within the scope of architectural tautology as supported by functionalist doctrines. He illustrates the reciprocal relationship between space and event, strengthening one another, with the example; "*The skater skates on the skating rink* (Tschumi, 1996, 160)."

Indifference, on the other hand, demonstrates a program sequence that is neutral to spatial sequence. Tschumi reinforces this correlation as follows: If you remain indifferent to the events that take place in the kitchen and contradict the event of sleeping, "*You can sleep in your kitchen* (Tschumi, 1996, 128)". As Tschumi argues here, space and event maintain their own

logic. Furthermore, functionalism and usefulness are not as prioritized as they are in the previous correlation.

The correlation in which Tschumi completely rejects the functionalist tendency is conflict. Here, he assigns a contradictory architectural program to space where space and event constantly violate each other's existence. Due to its conflictual relationship with the event, space acquires new levels of meaning. The examples Tschumi puts forward in order to explain asynchronous correlation are as follows; "*Pole vaulting in the chapel, bicycling in the laundromat, sky diving in the elevator shaft?* (Tschumi, 1996, 146)". According to him, pole vaulting in a chapel may be considered malicious, even if its interiority is thought to be interesting. Similarly, the elevator shaft is not a proper space for sky diving. In his third correlation, Tschumi attempts to break conventional hierarchies with conflictual relationships between spaces and events.

Reciprocity is the most appropriate correlation in which the episteme of Modernist Architecture established in the category of function can be placed. The episteme here is conceptualized with useful being, which characterizes the pragmatic aspect of object in the memory of Modernist Architecture. This episteme describes explicitness and usefulness of function as well as the linearity and orderliness of functional relations. Events occur where they are expected to, and by the people who are expected to perform them. Since utility is mechanically included in object, it is this mechanism, rather than the subject that establishes object. Function attributed to object is normative and rational. Furthermore, it is also the determinant of the form of the object, since form always, and only, expresses the function. As unexpectedness and uncertainty are eliminated from the relation between object and function, the episteme of useful being is guaranteed in the epistemology of Modernist Architecture.

On the other hand, conflict is the correlation that provides object for the counter-episteme of counter-memory. The counter-episteme here displaces concepts of utility and being fading the pragmatic feature of the object. This brings the question that will lead the inquiry to the counter-possibility of existence, the source of the episteme of mediated nothingness: When the object denies functionality and mediates futility, what remains of a useless modernist architectural object? This oppositional questioning is an attempt to make room for the counter-memory of Modernist Architecture. Here, the subject activates the object according to its own benefit because the object does not possess an explicit function or utility. Tschumi (1996) exemplifies this correlation with his architectural design Parc de la Villette, built in Paris between 1982 and 1998. He does not assign content or function to the park, but designs it as a base that organizes possibilities to function spontaneously. He places that base on a grid which both articulates and activates space. The grid rejects the ideologies, hierarchies and compositions of the past; it lacks a center and hierarchy. Tschumi, thereby, leaves the park open to users' own interpretations. In his book "Architecture's Desire: Reading the Late Avant-Garde", Michael Hays (2010) likens Parc de la Villette to a sort of architectural DNA. He states that all information needed for programmatic-spatial events to take place in the park, if not physically, is inherently present. He mentions that Tschumi refers to the park as "*the empty square, an absence, a spacing for events yet to come* (Hays, 2010, 155-156)". According to Hays, Tschumi means that the park lacks functional determinants but is ready to be filled with a variety

of experiences. Thus, an unpredictable variety of functions and micro-performances can be staged in the park.

The attempt to reverse the episteme of useful being appears long before Tschumi, in Casa 'Il Girasole' in Rome built by Luigi Moretti between 1947 and 1950. In his book "Ten Canonical Buildings" (2008), Eisenman examines this building as one of the canonical buildings because of its rustication that cannot be explained by any structural necessity. He specifies that the building is on a rustic base, but neither the structural logic of modernist piloti nor the traditional logic of rustication can explain the base of this building. In rustication in traditional base, heaviest stones should be structurally placed at the base of the building, and lighter stones should be gradually placed towards upper floors. Moretti subverts this rule in opposite way and makes the building heavier towards the upper floors. Eisenman describes it as false rustication with rhetorical base which is covered with stonework, patterns and sculptural motifs. Radical modernist Reyner Banham (Eisenman, 2008, citing Banham, 1953) states that the building is considered to be within the boundaries of vestiges of modernism, but to demonstrate Roman Eclecticism. He interprets this as a sign of modern architecture deviating from its imperatives.

Category of Meaning

With his Dom-ino Diagram dated 1914 and his text The Five Points of Architecture dated 1926, Le Corbusier contributes to the establishment of Modernist Architecture's epistemology by presenting modernist architectural program as a self-contained set of principles (Le Corbusier, 1931). He describes the Dom-ino diagram as the state of mind of mass-produced houses. Eisenman (1979) uses this diagram to analyze the changes in humans' understanding of the objective world from the early 19th century to the present day. Although the diagram initially seems to be a rather simple expression, Eisenman views it as the herald of a new culture. According to him, it illustrates the structural system technology of its time, a prototypical unit representing the idea of mass production and repetition, or the drawing of a perspective showing the principles of free plan. In the diagram, three horizontal slabs, six box-like footings, six linear columns and one staircase are presented as the minimal conditions for architecture. The configuration of the architectural elements seems to be a result of the necessity to comply with static norms, without any other intention, merely enabling the structure to stand. However, the diagram is representative of the most prominent phenomenon of modernism, namely, the self-referentiality of the object. Eisenman argues that the idea of self-referential sign, initiated with the Dom-ino diagram, is the true modernist aspect of Modernist Architecture.

Eisenman (1979) recognizes that the diagram intends to reveal its own particular configuration. Nevertheless, he explores its variations, assuming that the Dom-ino harbors other meanings. He does this through a series of interventions that produce zero degree of architectural form, deliberately ignoring the site and architectural program. Allen (2008) emphasizes that each of these variations functions equally well, both structurally and functionally. However, only one variation, namely, the precise configuration of the Dom-ino, is unique. The diagram is a sign system that distinguishes architecture from form, function and meaning, by referring to its own existence (or its own condition of existence) which is its most primitive condition. Signification in the Dom-ino is realized not by extrinsic

ideas borrowed from outside architecture, but by intrinsic ideas referring to architecture itself (Eisenman, 1979).

Inspired by Eisenman's insights on Corbusier's Dom-ino diagram, the realization of signification through intrinsic ideas that refer to architecture itself, that is, self-reference, is established as the episteme of Modernist Architecture in the category of meaning. Objects produced with this episteme, termed self-referential icon, do not refer to anything other than the reality of their own existence. They are both cause and effect of meaning. Meaning is produced solely by the object itself, and is sought within object. It is abstracted, cleared of ambiguities, and is known only through reason, without the need for empirical sensations. This sense is singular, linear, hierarchical and consistent. Its iconic status stems from the fact that its meaning is constructed by the object itself.

A critique of the construction of meaning through the existence of object in Modernist Architecture appears in Eisenman's article "The Futility of Objects: Decomposition and the Processes of Differentiation" published in 1984. Eisenman (1984b) argues that the idea of signification through abstract origin in modern architecture is as inadequate as the idea of signification by natural origin in classical architecture. He quotes from Daniel Libeskind (1984), and emphasizes that an object lacks the capacity to carry meaning through itself; thus, meaning should not be sought in its irrelevant and useless realm. This gives rise to the idea of an object whose meaning is liberated from being confined by its qualities. Consequently, meaning begins to be sought outside architecture. Here, the question that challenges the episteme of Modernist Architecture arises: If an architectural object is open to association and mediation in the signification process of the subject, could it be considered modernist? In light of this question, the necessity of deriving the meaning of the object from itself disappears and the subject gains the freedom to speculate on the meaning of the object. This freedom in counter-memory is conceptualized as the episteme of empty architecture index. It is a counter-memory initiative that brings the object closer to self-realization and reveals implicit meanings, implications and connotations. An object which is assumed to have this counter-episteme possesses a semantic flexibility. It is polyvalent, discontinuous, directionless, undecidable or reproducible. It is empty, awaiting multiple meanings and interpretations.

The concept of emptiness in question can be further explored through Roman Jakobson's concept of shifter and Rosalind Krauss's concept of index. Jakobson (1971) defines shifter as a concept whose meaning cannot be determined without referring to a message that is being communicated between sender and receiver. Krauss (1977a) likens Jakobson's concept of shifter to empty pronominal sign which awaits signification by a particular existence. According to her, an empty sign is capable of becoming a function of its own singular instance, whose signification can be explained only by the existence of its object. Eisenman (2008) states that Krauss introduces index as a concept that builds its meaning within the physical relationship with its referent, based on Jacobson's concept. Krauss's concept of the index is a sign or trace of a specific cause; a footprint in the sand, a fingerprint in the dust, or a cast shadow are examples of indexical signs of objects. The index is both the trace of a previous existence and the ghostly trace of that existence's current absence (Eisenman, 2008).

Krauss (1977b) refers to a work by Gordon Matta-Clark as an example of the empty pronominal sign. In this work, Matta-Clark cuts away the

successive floor boards of a derelict building, creating a vertical void. The building no longer functions or signifies as a building because its function and content have been emptied by this cutting action. The void created by the cuts starts to fill with a sense of time-past, conjuring previous events. Thus, it becomes an indicator of absence or the empty sign of an event. Krauss realizes that Matta-Clark's ambition is to capture the existence of the building, according to Eisenman (2008). To reach this ambition, Matta-Clark employs the index as a trace of the building's movement from its metaphysical existence to its pure existence (Krauss, 1977a; 1977b quoted by Eisenman, 2008). At this point, the issue that deepens the inquiry in the article is that Matta-Clark's cutting actions related to revealing indexical possibilities resemble Tschumi's experiments in Parc de la Villette. Tschumi's aim (1996) in the park is to create an architecture that means nothing. However this does not imply that the park is meaningless, but rather, it possesses semantic plurality and interpretive infinity, as he argues. He places folies at the intersection points of three superimposed autonomous systems in the park generating endless combinatory possibilities and a multiplicity of meanings that vary according to each interpreter.

CONCLUSION

Designed with the foresight of Lakatos' methodology of research programmes, the onto-epistemic inquiry has made it possible to criticize the theory and methodology of Modernist Architecture as a whole, through both its self-actualizing nature and counter-memory. While the designed inquiry mediates between the modernist architectural object and its opposite, it brings the epistemology of Modernist Architecture closer to the realm of ontology. The ontology of Modernist Architecture manifests as the broadest set of possibilities for existence, and serves as the foundation for all possible propositions. From this set of possibilities, those that can be made normative through causality fall into realm of the epistemology of Modernist Architecture. The epistemology of Modernist Architecture appears as a structured form of knowledge that is only one of the possibilities of its existence. The discussion conducted throughout the categories demonstrate that the Modernist Architecture not only reveals its structured norms and causalities in its memory but it also reveals the facts in its counter-memory.

The epistemes and their counter-epistemes embedded within the inquiry are designed to activate a dialectical reasoning. While the epistemes placed in the memory of Modernist Architecture are based on objective norms and causalities, the counter-epistemes placed in the counter-memory of Modernist Architecture are derived from the counter-modes of existence. The counter-memory opposes the epistemes, but it paradoxically generates its counter-epistemes from the very epistemes it challenges. The counter-memory and counter-epistemes play an active role in the discovery of non-causalized potential of existence.

The following evaluation can be made regarding the epistemes and their counter-epistemes established in the categories:

The category of form reveals a matter of reality embedded in Modernist Architecture. While the object's form is determined by an external explanation in the memory of Modernist Architecture, it is accessed through internal understanding in the counter-memory. The modernist

architectural object is an object of representation; an abstract representation of itself through its formal properties. It does not depend on the intentions or thoughts of the subject that produces or encounters it. However, the counter-memory reverses this encounter. The subject does not encounter a precise configuration of the object but rather the possibilities of its existence. The object is no longer an object of representation; it becomes ordinary and open to intentions and thoughts. The episteme of representation of object in Modernist Architecture does not allow any empirical state of being, while the counter-episteme of ordinariness of object frees the object from its dependencies to part-to-whole relationship.

The category of function manifests that object has a capacity that has not yet been discovered by the mind, in addition to its capacity that has been put to use. In other words, the capacity which is open to pragmatic use is not the entire capacity the object possesses. The way to reach the undiscovered capability of the object is to make reasonings about it. The counter-memory expands this capacity using the freedom of futility which becomes the condition to release the object's potential by freeing it from restrictions. While the episteme of useful being is conditioned on object's freedom by purifying it from its contextual relations, the counter-episteme of mediated nothingness liberates those relations positioning existence into a process of becoming. While, in the memory of Modernist Architecture, usefulness implies that the object fulfills a determined function, in the counter-memory, it corresponds to self-realization of existence. When the object forsakes its pragmatic feature and becomes futile, alternative modes of its existence are activated.

The category of meaning opens a paradoxical inquiry into the relationship between the subject and the object. In the episteme of self-referential icon established in the memory of Modernist Architecture, the object's meaning is determined by the nature of the object itself, that is, the subject is not involved in the signification process of the object. Here, the subject is a tool for revealing objective reality through the object's meaning. However, in the counter-episteme of empty architectural index established in the counter-memory, all possibilities of signification arising from the encounter between the subject and the object are released. The paradox here is that an ontological issue regarding the object's meaning is attempted to be explained using epistemological notions in the memory of Modernist Architecture. This is an illusion that the epistemology of Modernist Architecture, which deals with how its object is methodologically known, is also able to theoretically capture its meaning.

The research in this article, conducted with the aim of revealing the possibility of Modernist Architecture as a fallibilistic theory, also brings with it speculative interpretations of its contradictory character. The objective here is to explain the gap between the established norms of Modernist Architecture and its speculative defects. In this context, in the field of ontology, the article provides a theoretical framework for understanding the deep structure of Modernist Architecture, critiquing its origins, and interpreting its autonomy. Correspondingly, in the field of epistemology, it presents a methodological framework that enables a discussion on the limits and accuracy of Modernist Architecture. What makes the subject of this research unique is its abolition of the superiority of Modernist Architecture over its counter-memory and its exploration of the possibilities in the counter-memory. In the Lakatosian sense, such an investigation means searching for the logical possibilities of shaping a

theory in many different ways, ad infinitum. As a result, it is possible to appraise the Modernist Architecture in a holistic manner, and contribute to the ongoing expansion of architectural theory.

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MODERNİST MİMARLIĞIN HAFIZASINA VE KARŞI-HAFIZASINA DAİR ONTO-EPİSTEMİK BİR SORGULAMA: NORMLAR VE NEDENSELLİĞE KARŞI KUSURLAR VE BOŞUNALIK

Bu araştırma Modernist Mimarlığın ontolojik ve epistemolojik statüsü üzerine eleştirel bir sorgulamadır ve böylesi bir sorgulamanın Modernist Mimarlığın hafızasına ve karşı-hafızasına yöneltilerek yapılabileceği argümanına dayanmaktadır. Araştırmanın hipotezi, Modernist Mimarlığın bir hafızaya sahip olmasının yanı sıra bir karşı-hafızaya da sahip olduğu; hafızasında biriken normlar ve nedensellikler aracılığıyla kendini gerçekleştirdiği; ancak kusurlarının ve boşunalıklarının da olduğu ve bunlarla kendini gerçekleştiremese dahi, bunların Modernist Mimarlığın karşı-hafızasında birikmeye devam ettiğidir. Normlar ve nedensellik Modernist Mimarlığı herhangi bir zamanda doğrulayabilen, üzerinde mutabakata varılmış özelliklerini kuşatan epistemler seti tanımlarken, kusurlar ve boşunalık Modernist Mimarlığın bu set tarafından açıklanamayan tekil, sezgisel ve anormal özelliklerini kapsayan ve doğruluk değerinden şüphe duyulan karşı-epistemler setini temsil eder. Araştırmanın amacı, Modernist Mimarlığın her iki set üzerinden de değerlendirebilebilmesine olanak tanıyan bir metodoloji geliştirmek ve bu metodoloji aracılığıyla Modernist Mimarlık teorisinin yanılabilirlikçi bir olasılığını ortaya koymaktır. Bu amaç uğruna, araştırma Imre Lakatos'un araştırma programlarının metodolojisiyle çerçevelenen bir araştırma programına dönüştürülür. Bu program çerçevesinde Modernist Mimarlığın normları ve nedenselliği Lakatos'un olumsuz höristiği içerisinde, kusurları ve boşunalığı olumlu höristiği içerisinde sorgulanır. Modernist Mimarlığın ontolojik ve epistemolojik statüsüne ilişkin yürütülen bu sorgulama onun biçimsel, işlevsel ve anlamsal süreçleriyle sınırlandırılır. Sorgulama boyunca ve sonuçlar bağlamında araştırma, Modernist Mimarlığa dair spekülatif yorumları açığa çıkarır ve bir eleştiri sunar.

AN ONTO-EPISTEMIC INQUIRY REGARDING MEMORY AND COUNTER-MEMORY OF MODERNIST ARCHITECTURE: DEFECTS AND FUTILITY AGAINST NORMS AND CAUSALITY

This research is a critical inquiry of the ontological and epistemological status of Modernist Architecture, and is based on the argument that such an inquiry can be made by directing attention to Modernist Architecture's memory and counter-memory. The central hypothesis is that, in addition to having a memory, Modernist Architecture also possesses a counter-memory; it actualizes itself through norms and causalities accumulated in its memory. However, it also possesses defects and futilities, and even though it cannot actualize itself through them, they continue to accumulate in the counter-memory of Modernist Architecture. Norms and causality constitute a set of epistemes which encompass the agreed upon characteristics capable of validating Modernist Architecture at any given time, whereas defects and futility represent a distinct set of counter-epistemes that encapsulate the singular, intuitive, heretical, and anomalous characteristics of Modernist Architecture. The aim of this research is to develop a methodology that allows for the appraisal of Modernist Architecture from both sets and, through this methodology, to present a fallibilistic possibility for modernist architectural theory. To achieve this goal, the research is transformed into a research program framed by Imre Lakatos' methodology of research programmes. Within this program, norms and causality of Modernist Architecture are inquired in Lakatos'

negative heuristic, while its defects and futility are questioned in his positive heuristic. The inquiry to the ontological and epistemological status of Modernist Architecture is limited to its formal, functional, and semantic processes. Throughout the inquiry and in the context of the conclusion, the research reveals speculative interpretations of Modernist Architecture and offers the possibility for critique.

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