### Rethinking the Evolution of Intellectual Systems of Architectural Aesthetics Based on an Anthropocentric Approach

#### Somayeh Moosavian<sup>a\*</sup>- Behnaz Aminzadeh Gohar Rizi<sup>b</sup>- Azadeh Shahchraghi<sup>c</sup>

<sup>a</sup> Ph.D in Architecture, Science and Research Branch, Islamic Azad University, Tehran, Iran (Corresponding Author). <sup>b</sup> Professor of Urban Planning, College of Fine Arts, University of Tehran, Tehran, Iran.

° Associate Professor of Architecture, Development, Science and Research Branch, Islamic Azad University, Tehran, Irann.

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#### ABSTRACT

Accepting architectural aesthetics in the form of human-centered approaches is a field no sufficient attention has been paid to its relevant theoretical contents to identify it. There has always been bewilderment in answering which theoretical model of architectural aesthetics is more comprehensive from this perspective because this qualitative concept has remained vague. Therefore, the question raised here is which paradigms in architectural aesthetics have been formed based on anthropocentrism so far? What factors have been the basis of value judgments and the evaluation of the views? And what stance have present theoretical models in architectural aesthetics taken on the subject of humans? Therefore, the present study aims to examine the evolution of stances taken by architectural aesthetics on the different dimensions of human existence. Accordingly, this descriptive-analytic research qualitatively focuses on the typology and comparative study of different approaches to aesthetics with an interpretative view. The significance of identifying human-oriented views arises from the fact that rereading the aesthetic ideas, which are basically related to human existence, enables us to return the theoretical stances to the subject of environmental perception and development. The results of the present study showed that each of the dominant theoretical views, from the beginning up to now (i.e. classic, modern, postmodern views), have addressed one or a few interrelated dimensions of architectural aesthetics from the perspective of human nature. However, the present theoretical paradigm holds the concept of "embodied experience" as the central characteristic of pleasure in architecture. In this view, the basis of aesthetic experience is experimental perception with satisfactory quality, achieved through active interaction between individuals' objectivities and subjective images and space. Moreover, the emotional influence of "embodied perception" values human awareness of architectural work. Such an experience relies on presence, and beyond it, the synthesis of embodiment, emotion, and perception through human insight.

Keywords: Beauty, Architectural Aesthetics, Embodied Perception, Aesthetic Experience.

<sup>\*</sup> E\_mail: m.moosaviyan@gmail.com

#### **1. INTRODUCTION**

Architectural beauty has had various aspects in different ages; that is, it has been manifested as different theories depending on its contemporaneous dominant theoretical insights and perspectives. Now, a question arises as to what is the nature of architectural aesthetics? In other words, what has been the basis of aesthetic judgments in architectural paradigms from the beginning up to now? This paper seeks to focus on the question of which theoretical and perceptual conditions influence the experience and evaluation of a building, as architectural integrity of its kind, without reliance on an external or implicit, ideological, political, or social philosophy. Therefore, this paper does not seek to find an answer to the question of what is architectural aesthetics? because it is not possible to provide a definitive answer to this question, nor does it seek to review the philosophical debates and their historical background; rather, the paper intends to conceptualize the nature of architectural aesthetics based on contemporaneous dominant perspectives and attitudes and deal with those aesthetic ideas with logical relevance to architecture.

The theoretical framework is the recognition of the roots of systems of thought and aesthetic assessment methods, and the provision of a comprehensive category of different aesthetic approaches from the perspective of human-architecture interaction in different systems of thought. It also aims to provide comparative grounds between different attitudes and approaches to aesthetic values, which have been theoretically developed. Then, this theoretical structure leads to the identification and development of significant aspects of factors affecting contemporary thought systems.

This study intended to recognize the historical roots, present a comprehensive categorization of different architectural aesthetic approaches to the subject of humans, and provide the context of logical reasoning and a comparison between different approaches and anthropocentric values in architectural aesthetics, that are present in the recent theoretical development. Achieving this objective can generally lead to opportunities for providing suitable context for leading research approaches.

The innovative dimensions of the present study were the retrieval, introduction, and discovery of the relationship between assessment-based narratives of the theorists about the concept of architectural aesthetics and its compliance with perceptual topics of aesthetics in different approaches, which have been essentially changed with an emphasis on the emotional evaluation made by human "experience." In other words, this study addressed the evolutionary course of this experimental concept by reviewing the existing theories to reinterpret the highest quality of human-architecture interaction. In line with this, this study has some similarities with the experimental philosophy. It means the introduction of a new system of thought through the experimental study of aesthetics about a subject to which the interpretive reasoning-based scrutiny is inapplicable. Finally, this study dealt with the "subjective qualities" of human experience in the assessment of architectural aesthetics (Table 1).

Table1. Research Attitude to the Subject

Subject	Research Topic	Research Question	Research Purpose
Ontology	The nature of paradigms in architectural aesthetics through the recognition of thinking roots and evaluation approaches	What is the basis of the nature of architectural aesthetics from the beginning up to now?	Recognition of historical roots and reconsidering the history of different theories on the subject of humans in architectural aesthetics
Epistemology	Perception of various types of architectural views on different dimensions of human existence in each system of thought	What factors have the aesthetic judgments in architecture been founded on in each period?	Scrutiny of the interaction among the criteria of architectural aesthetic judgment based on the view on the different aspects of humans such as body, experience, subjectivity, objectivity, etc.
Methodology	Presenting a comprehensive categorization of different approaches to the subjects of human in architectural aesthetics and providing a comparison between them in terms of the dominant values in each period	From which view the current paradigm in architectural aesthetics has addressed the subject of humans?	Providing the context of logical reasoning and a comparison between different approaches to anthropocentric values in recent theoretical development

#### 2. METHEDOLOGY

This study examines architectural aesthetics from the perspective of "theoretical aesthetics" using an interpretative approach as it would result in the rereading of the historical development of various systems of thought, identification of their evaluation criteria, and systematic data categorization through a subjective-conceptual interpretation, and the achievement of the research objective by developing the model. So, the qualitative content analysis with an interpretive approach was used. The qualitative content analysis provides guidance. In addition, the comparison of components, which is based on major studies in this scope, was made. The study used a comparative method for the logical reasoning of the findings by exploiting the literature and available theories (Table 2).

Table	2.	Data	Analysis	Framework
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Recognition Stage	Rereading of the Systems of Thought	Elucidation Stage	
Recognizing the main components in the formation of theoretical approaches	Comparative study using an interpretative approach	Analyzing theoretical theories and extracting the criteria of architectural aesthetic perception from them	

#### **3. THE THEORETICAL FRAMEWORK OF RESEARCH**

Dealing with the aesthetics of architecture from the perspective of theoretical aesthetics with an interpretive approach requires re-reading the evolution of different thought systems and their evaluation criteria from this perspective. Therefore, in this regard, the main theoretical discourses and theories in the field of architectural aesthetics are explored and re-read in chronological order, and then the criteria related to the perception of beauty in each system of thought are identified and extracted.

## **3.1.** The Main Theoretical Antecedents of Architectural Aesthetics

There are various perspectives of architectural aesthetics, but two main issues are taken into account in this area: (1) Theoretical aesthetics: It refers to the understanding of the quality of creativity and beauty, includes the research of aesthetic philosophy and creation processes, and emphasizes normative theory with the characteristics of metaphysical and psychological analysis; (2) Experiential aesthetics: It refers to the identification and understanding of the factors of perceptual experience, which leads to aesthetics or pleasure. It relates to the research of perception, cognition, and attitude and focuses on empirical theory with psychological characteristics (Lang, 1987, p. 207). But the philosophy of architecture is introduced in the framework of three theoretical aesthetic approaches:

1. "Aestheticism": It is introduced in the category of classicism and focuses on the superficial beauty and the decoration of the building by separating form from function.

2. "Teleology": It is expressed in the form of a modernist movement, and emphasizes the functionality of architecture in terms of its features of generality and location. According to Carlson, functionalism involves not only reaching a certain goal, but also the internal and external fitting of the building. In this regard, Haldane, inspired by the ideas of Aristotle and Aquinas, considered a social function for architecture.

3. The third approach is "postmodernism", having to do with words such as "meaning, representation, and symbol". This approach considers the understanding of buildings beyond their visual validity. Goodman uses the term "aesthetic cognitivism" with this attitude about the meaningfulness and referential links of architecture (Levinson, 2003, p. 560).

Architectural theories cover a wide area, ranging from cultural studies to environmental aesthetics, through philosophical studies; and its central point is where conceptual searches and anthropological studies intersect. Therefore, it is not surprising that aesthetics shows increasing attention to architecture in the middle of the transition from modernism to postmodernism, because this attention theoretically leads to the interpretation of architecture as a text (Guter, 2010, p. 14). Architectural aesthetics theories often differentiate between decorative and structural aspects as various aesthetic principles are apparently raised in each case as needed. Therefore, architectural aesthetics broadens the meaning of the term "aesthetic principles" in different aspects using unique ways (Townsend, 2006, p. 27). Hence, architectural issues have an interdisciplinary perspective in their approach to aesthetics and put a general emphasis on the recognition of strategies derived from other sciences, because they all rely on their own epistemology.

Given the unpredictable impact of Kant's philosophical thinking on aesthetics and particularly, on architectural theory, these concepts can be divided into three periods:

(1) Pre-Kant theories, (2) Post-Kant theories until 1960, (3) Contemporary theories from 1960 up to now.

Armanshahr Architecture & Urban Development

119 |

## **3.1.1.** Architectural Aesthetic Theories, from the Beginning to the Advent of Kant's Philosophy

Almost the entire period of the history of Western architecture prior to Kant's was influenced by two books: (1) "Ten Books on Architecture", written by Vitruvius during the Roman period, and (2) "On the Building", written by Alberti (1425) which is derived from Vitruvius' work. These two works contain detailed thoughts on normative and ontological aspects (Haldane, 1998, p. 4). In this sense, influenced by Aristotle, Vitruvius looks for architectural beauty in the "truth of nature", i.e. proportions and symmetry. According to the ancient Roman cosmology, architectural aesthetic principles were considered in accordance with nature, and aesthetic rules were considered in the symmetry and proportionality of the inter-column spacing. Vitruvius explicitly considered these aesthetic rules as timeless principles and an analogy to the "human body". He compared those rules with a "well-shaped man" and converted them to a set of constant proportions from which "the Vitruvian man" originated (Rowland & Howe, 2001). He created a kind of visual modification by placing the geometric proportions and the eye mechanism in a single row (Mallgrave, 2010, p. 16).

The architect of the ancient classical period never created out of nothing, because what was evident had already existed in a deep sense. Techne-poiesis (art/ craftsmanship) revealed a pre-existing thing through mimesis or imitation. In this sense, architecture reveals the "truth" by displaying the cosmic order in the terrestrial world and the astonishing order of nature and the human body through "analogy." It was a form of precise knowledge that, in an architectural non-instrumental relationship, was similar to scientific knowledge which, through the proportional order, was represented by architecture not as a building, but as a human condition in human experience space-time (Pérez-Gómez, 2016, p. 26).

In the Renaissance, considered architecture as a representation and metaphor of the human body form, and Alberti's physical metaphor-based attitude promoted the perspective that remained credible until the 18th century. By exploring the conventional aesthetic principles of architecture, he considered the creation of beauty through the proportions of numbers. According to him, "beauty is a form of agreement and coordination between members of the body and the consistency of a general plan and a definite situation dictated by Concinnitas (the soul of beauty in the sense of the parity of spirit and reason) which is the fundamental and definitive law of nature." (Mallgrave, 2010, pp. 25-31). Referring to the content of architecture in defense of classicism beauty, Winters used the title of "representational theory" (Gaut & Lopes, 2013, p. 658).

In this period, the philosophy of architecture was considered to be a branch of philosophical aesthetics,

dealing with various theoretical and practical problems. The oldest writings of the ancient covenant relate the principles of architecture to the more general metaphysical elements of form and order, and this tradition continued throughout the Renaissance and subsequent periods. Using the title of "core subjects and themes" for this era, Haldane believed that Vitruvius, Alberti, Palladio, and others introduced a metaphysical theory about "regularity" when they referred to the importance of "proportions". From this point of view, beauty is the result of designing combinations that make the selection of suitable units and modules (Haldane, 1998, p. 5). With this perspective that beauty is an objective description (Eurythmia as a way of displaying buildings to deceive the eyes of viewers) through the physical properties of architecture (Thomas, 2015). During the Middle Ages, Pythagorean's main attitude, following Neoplatonic beliefs, turned architecture into a powerful tool for the symbolic reflection of the transcendental reality. Despite such assumptions about the true origin of form in architecture since ancient times, beauty was considered to be equal to nature and the aesthetic experience was also considered to be a confrontation with properties that have a character independent of human experience toward them (Haldane, 1998, p. 6). Until the 17th century, the priority of "sensory perception", as the ultimate criterion of knowledge, was never questioned, and Mathesis geometry and numbers clearly retained their symbolic implications, and the hierarchical structure with the universe was still considered valid and had a qualitative and mythological aspect. In the Renaissance, the theory was consistent with metaphysical tendencies, often implicit in the mathematical rules, and with the "mythological" and embodied world in the discussions of Vitruvius. However, the prescriptive nature of the rules of the classical systems was emphasized instead of "meaning" from the mid-sixteenth century. At this time, the architect's attention to Mathemata was not merely formal. Even the triple division of Vitruvius, (strength, functionality, and beauty), was not considered to be independent criteria, but transcendental and necessarily symbolic values. The form was not only a function of performance but also the main instrument of compromise between the permanent dimension of truth and the variable dimension of reality (Pérez-Gómez, 2016, pp. 7-10) Changes in this view began in the 17th century, Perrault (1683) questioned the traditional role of proportions in ensuring the relationship between the microcosm and macrocosm and the importance of correcting the optical illusion that has always been the reason for the clear differences between theoretical instructions and practical professions. He could not validate the architectural capacity for the emergence of the proportional and harmonic experience that was revealed by matching the proportions with the site and the programs based on sensory-motor perceptions;

for him, the theory was not related to an absolute mythic or religious truth. His view was an end to a way of understanding the building in connection with cosmological images, which provided the final and intersubjective framework for any meaningful human action (Mallgrave, 2010, pp. 26-39).

## **3.1.2.** Architectural Aesthetic Theories, from Kant's Philosophy until 1960

From the eighteenth century onwards, important issues emerged about the way people are influenced by the built environment. The issue of "tastes" in aesthetic judgments and fundamental justifications for beauty was researched by British empiricists. Burke (1757) gave various psychological explanations of architectural features and of our approval of them. In his opinion, anything that triggers ideas and motives relating to pain and danger in one way or another is somehow in a "sense of sublime". This is the strongest feeling and emotion that the mind can sense. With the claim that sublime-excited emotions are not related to numerical proportions or homomorphic proportions, and are more closely related to the softness and stiffness of the optic nerve, he traced a new path to the beauty theory (Mallgrave et al., 2015, p. 11). Thus, his goal, in contrast to "humanistic aesthetics" was to address the characteristics of the aesthetic sensation and perception of architectural observation.

In line with this, Gypelin and Price (1790) put forward the term "picturesque" which is a combination of the sublime and beautiful. Based on this concept, Knight and Price set forth a kind of "sentimental architecture" that first absorbed the senses and then aroused emotion. This idea was once again expressed in (1778), which emphasized architectural forms that express the movement and variety in complex compositions (Baroque architecture). Therefore, can see a change in "architectural tastes" at the end of the 18th century. Aesthetic theories emphasized "emotive architecture" and criteria such as visual complexity, abnormality in form, diverse skylines, and pleasant views that were free from any classical symmetry, which ultimately led to the eclecticism of various styles and exquisite decorations (Ibid, pp. 42-50).

Kant distinguished between the old and new schools of thought. The first school of thought considered beauty as a non-relational and intrinsic property of the object, and the latter considered it as features stimulating aesthetic response and experience in the viewer. he paved the way for various architectural functionalistic ideas by introducing post-Vitruvinian or "expressive perception". He considered the usefulness of architecture, or in his own words, "visual purposiveness" of the building to be essential (Guyer, 2011, pp. 13-17). From that time on, new philosophies of mind and value began to emerge, considering the aesthetic experience to be subject to the information and tendencies of conscious mind holders; thus, architectural aesthetics entered the realm of the "taste theory" (Haldane, 1998, p. 4). Thus, the main focus of aesthetic topics was based on the principle of disinterestedness and the formalistic mode of perception throughout the twentieth century, a paradigm that was based on disinterested reflection upon sensory and formal aspects (Gaut & Lopes, 2013, p. 543). Until this time, in the realm of philosophical aesthetics, architecture was distinguished from other branches of art for at least two reasons: First, systematic reflection on the nature of architecture was more or less a new subject. Secondly, it was mostly architects rather than theorists who laid down a framework for the orientation of architectural philosophical reflections to the teachings of prominent architects (Levinson, 2003, p. 555).

In 1857, Theodor Fischer, who pursued Hegel's ideas, published "Aesthetics" and regarded architecture as a "symbolic art". He gave a physiological basis to the emotional and symbolic readout of architecture. In the same way, in 1874, Robert Fischer used the term "empathy" to explain the concept of architectural beauty. Based on this explanation, the particular proportions seem pleasant not due to mathematical proportions, but because of the stimulation of the harmonious flow of emotions in the human imagination. In the late nineteenth century, the concept of "empathy" in the realm of theories in Germany found many supporters, including Van De Velde. In such a realm, this concept initiated a kind of form abstraction in which emotional power was only concerned with the form rather than the symbolic or historical attachments nowadays referred to as "modernism" (Mallgrave, 2010, p. 78).

With his formalistic aesthetic approach, Göller (1886) believed that the creation of a new style of architecture was the first step in the formation of the term "memory image". He knew it was a mental and unconscious reason that created the pleasure of the form. Creation of this image is a process that is accustomed to the patterns of the memory of individuals from a certain period or a particular culture in the form of a framework and proportions of certain forms, and the presentation of new forms creates a new "memory image". Thus, he paved the way for the beauty of modernism by separating the form from the historical appearance with reference to the time constraints of the styles and the presentation of a formalistic abstraction model (Ibid, p. 117). From that time on, the problem of style, as a form of expression and coherence of architectural "language", became a theoretical problem, and the search for unchanging laws extended to the aesthetic scope, and architecture found a mere materialist structure (Pérez-Gómez, 2016, p. 13).

Following the development of architectural theories, the "aesthetics of modernism" was born through the theorizations of Le Corbusier, with an emphasis on "functional beauty". His goal was to reach the nature of order through the human scale, which is called Armanshahr Architecture & Urban Development

121

"anthropometry". He developed a universal method based on biology and human body dimensions to determine the design criteria and architectural aesthetics. Influenced by modernism, and through interpreting aesthetic rules with a new language, he gradually created a "mechanical aesthetic" system in his book "Toward a New Architecture" towards abstract representations (Corbusier, 2013).

With the development of the fields of physiology, "formal aestheticism" was founded under the influence of Gestalt psychology. Based on the German word Gestalt, meaning "bearer of meaning", the whole perception of sensory events is meaningful. Arnheim puts forward one of the main themes of aesthetics, in which the brain tends to visually read perceptual events through metaphors during the process of thinking or classification (Arnheim, 1965, p. 445). He considered this to be an unconscious reaction to the empirical world. He expanded the idea of visual metaphors and non-symbolic forms of "representation". Then, he defended Modernist Architecture. His argument, i.e. the analysis of "visual forces" involved in the "field of visual perception" of architecture, was influenced by visual expression. With an empirical approach, he relates the problem of architectural metaphor to visual senses and states that an architectural work, as a whole and in its parts, is a symbolic statement that carries human characteristics and conditions due to senses; and symbols are rooted in "perceptual senses," and sensory symbols affect the strength and richness of "architectural experience" (Arnheim, 1977, p. 208).

It is noteworthy that, the first definition of perception of the aesthetic dimension of space came from of Hildebrand's form theory (1893). His knowledge of perceptual psychology enabled him to compose a treatise on "kinetic perspective", in which he was inspired by Lips and Wolfin. This aesthetic perception had a major impact on the perceptual system. He considered the perception as the kinetic nature of the experience and argues that human perception of the spatial characteristics of images is the result of an effective kinetic process, and that, contrary to Kant's conception, space is not a prior condition for experience, but a product of experience itself (Nuffida, 2004, p. 2).

## **3.1.3.** Architectural aesthetic theories, from 1960 up to now

From the second half of the twentieth century, the aesthetic concept of architecture and environment was changed, which was itself a new paradigm and had a profound relationship with the emotional and cognitive aspects of the environment. A large volume of theoretical models developed based on the foundations of developmental and environmental psychology Carlson, 2000; Bourassa, 1990; Nassar, 1988). By studying the process of real-world perception assessment, a number of studies in the

1970s, including Gibson's theories, (Gibson, 1986) paved the way for the development of studies that dealt with environmental aesthetics. On the other hand, functionalism's failures triggered a reaction from native architecture, as a messenger of postmodernism, against modernism, now covering a wide range. At this time, emphasizing the "transcendental matter" and following the psychoanalytic and philosophical models of "phenomenology", an emphasis was placed on the space experience of the mind as an inner and intrinsic matter, so that the conscious presence of the "body" in architecture marginalizes the positivist and non-experiential aesthetics of modernism (Nesbitt, 1996, p. 30).

Postmodernists criticize the modern theorization of the experience of architecture. They argue that positivist epistemology has reduced our experience of architecture to facts and properties, by discounting its emotional, moral, and ethical contents. In the positivist object-subject split, the experience of architecture has been narrowly determined by functional coordinates and accepted as a source of objective knowledge. This is because its objectivity and its truth can be logically deduced or empirically verified. On the other hand, our emotional responses to architecture and our preference for certain values of aesthetics have come to represent a purely subjective domain that cannot be grounded in reason. Subjective preferences, for this reason, have not been accepted as a legitimate source of knowledge. Because This reductive split does not recognize any cognitive value gained from subjective experiences. Furthermore, the separation of experience from its moral and ethical content and the separation of architecture from its social, political, and cultural context have created an autonomous space for architecture. Postmodernists contend that a visionary and autonomous image of modern architecture has been achieved by a complex maneuver. The object is first decontextualized from the specificity of its social, political, cultural, and physical context, and then recontextualized as a "visual representation" to be judged on specifically aesthetic and formalist terms. (Bhatt, 2000, p. 230)

Thus, in contrast to the old paradigm, in the book "Survival through Design" (1954), Neutra considers architecture beyond the visual qualities and views it as a multi-sensory art influencing the experience through physiological and psychological perceptions (neuropsychological function), and his discussions turned into a benchmark in the "human ecology" approach to architecture (Mallgrave, 2010, p. 108). Berleant also introduced a new paradigm with two motives: First, abandoning the opposite concepts of subjectivity/objectivity; and, second, reducing the distance between the perceiver and the perceived, so that the perceived can be understood fully and multi-dimensionally. He used the title of "aesthetic engagement", a model that suits any kind

With Scruton's book The Aesthetics of Architecture (1989), the conceptual studies of architectural aesthetics have emerged as a separate area in the analytical philosophy of art. This type of aesthetics was affected by two aspects of the structure of Kant's theory: first, providing a theory about the experience and judgment of architectural works; and, second, explaining the depth and flexibility of the aesthetic experience arising from the understanding of the works (Gaut & Lopes, 2013, p. 665). Referring to the 19th-century architectural principles, he states that architecture is a human reference in the human world that is judged within its meaning, i.e. principles such as visual perception and the significance of the appearance of a building resulting in aesthetic experience (Scruton, 1989, p. 114). In this regard, the concept of "everyday aesthetics" is understood by human beings based on pragmatic judgments and specific patterns of their environment, and on this basis, he places man at the center of aesthetics (Ibid, p. 206).

Scruton's position is based on the mind-action philosophy and the theory of meaning, and he is strictly mindful of the conditions of human perception of architecture; his strength of work is Wittgenstein's conception of the mind and the "theory of experience" (Gaut & Lopes, 2013, p. 665). The explanation of an evaluative understanding of architecture refers to the "content of experience", which derives directly from the architecture and can, based on the level of human attention, have different levels (superficial-deep) (Ibid, p. 389), in the sense that, the attention to the architecture is a function of a creative mind and imagination rather than the passive perception of affection or sensory perception. This, as with any other action of the mind, optionally leads to experience; therefore, architecture shares the understanding of "human experience" (Graham, 2005, p. 180).

Winters also emphasizes the concept of the "imaginary experience" with the aim of architectural ontology in beauty perception. In his opinion, the building is perceived by a kind of "descriptive content" that objectively/subjectively needs creative attention. Therefore, the nature of "imaginary experience" requires an integrated description of the interconnected experience of architecture, which is the basis of its judgment (Winters, 2007, p. 138). According to him, architecture is integrated with the lives of its users, and a certain kind of architectural beauty is perceived in this integration. He uses Graham's "Dionysus" concept, which refers to the sensory involvement of man and architecture, and the result is a kind of aesthetics that comes from the inner reaction of humans aroused by integration with space (Winters, 2011, p. 65) (Table 3).

	Period	Main Theorists	Theorie	s of Aesthetics	Aesthetic Approach	Evaluation Methods
Before Kant's Philosophy	Ancient Classic	Plato (427-347BC), Aristotle(384-322 BC),Vitruvius (1stcentury BC)		Transcendental approach	Deductive method (Architectural imitations of human body proportions	
Before Ka	Renaissance (15th to 17th Centuries)	Alirati Palladio De Jordeau Filarete etc.	The prescriptive nature of the rules of the classical systems (Number, ratio, order)		Cognitive approach	Paradigmatic method (Systematic)
After Kant's Philosophy	18th and 19th Centuries	British Empricists (Hutcheson, Locke, Hume, Burke, etc.)	The subjective nature	Sensory arousal of taste criteria	Emotional / rational approach	Individual perception
		Kant Hegel	The subjective nature	Taste	Emotional / rational approach	Individual perception
		Fechner	The subjective nature	The study of the principles of perception through psycho- logical – physical examinations	The foundation of experimental aesthetic science	A universal method through the provision of general criteria

123 |

Moosavian, S. et al.

Period		Main Theorists	Main Theorists Theories of Aesthetics		Aesthetic Approach	Evaluation Methods
After Kant's Philosophy	18th and 19th Centuries	Gestalt school (1912)	The subjective nature	Principles of visual perception	The formalism approach	Psychological
After Kant's		Adolf Loos, Le Corbusier etc.	The prescriptive nature of the general rules	Rationalism	Matching form and function	A rational method
Post-Modernism	From the Second Half of the Twentieth Century to Now	Charles Jencks, Robert Venturi, Rome Colehouse, Peter Eisenman, etc.	The prescriptive nature of multiple individual rules	Eclectic and deconstruc- tive	A critical approach	The negation of conventional aesthetic standards
Integration of the Phenomenology and Environmental Psychology		Gibson, Dewey, Schultz, Scruton, Berlint, Winters, etc.	Experimental nature Perceptual presence (sensory / motor) Multi-sensory perception (sensory richness) Imaginative experience Awareness		Humanistic approach	Interactive method

#### 4. DISCUSSION

Until the advent of Kant's philosophy, Vitruvian ideas were formed as the basis for the theories on "classical aesthetics" based on the beauty of the human body proportions. Moreover, they were followed during the Renaissance due to their analogical function of "representing nature". In this period, the "Vitruvian" model was used as the theory of aesthetics and the objective rules institutionalized for architecture. It was a kind of "aesthetic imagination" through which a series of values and concepts were manifested. Classicism linked the principles of architecture to metaphysical elements and "implicit concepts"; and human body proportions were the criteria for achieving metaphorical proportions and supernatural elements. Therefore, the classic form adapted the human body as a "figurative pattern", and the proportional perception of the human body was represented as a measure of beauty through architectural proportions.

As mentioned earlier, the development of the "conventional principles" of classical aesthetics returned to the theory of Pythagorean numbers. The realization of the beauty of nature was a process through which the Pythagorean theory was gradually combined with human proportions. This process began with the belief that mathematical relations involve a regular beauty. Hence, human proportions were the first principle to be strengthened by "numbers", that is, mathematical ratios were aesthetically associated with human proportions through allegorical relations. Therefore, this approach was a combination of the mathematical system and imagination (metaphor), which emphasized the human body, and developed a kind of aesthetic "hybrid technique" arising from the evolution of the "aesthetic imagination" based on the mathematical system.

At this time, the nature of beauty, with the formalist approach, was, for the first time, an attempt to retrieve the concept of beauty in a classic way. It referred to the principles that merely manifested the formalist beauty through the extreme use of classical elements, disregarding the functional nature of the building. It was a kind of aesthetic objectivity that appeared in the ornaments of the building facades. In general, one can see a rational approach or a "cognitive aesthetic" approach to theories. In this sense, a set of rational aesthetic concepts was introduced that included public rules and general insights, as well as objective criteria, such as the golden proportions, which, according to the Pythagorean equation, are based on human body proportions.

In the Renaissance and the Middle Ages, "cognitive aesthetics" showed that beauty is the same right proportion. Regarding this rational approach, Nassar used the term "speculative aesthetics", which was based on the prescriptive pattern. He believes that this issue identifies objects as they should be rather

than what they are (Nassar, 1998, p. 21). Therefore, before Kant's theory, aesthetic theories argued, with a cognitive approach and metaphysical view, that the qualities of aesthetics are common criteria; and the nature of beauty reflects many philosophical insights as well as normative and universal theories. Thus, the objectivist paradigm in this period included considerations assessing the quality and the nature of beauty on the basis of explicit assumptions; and until the 17th Century, the theme of beauty in architecture was not an isolated and independent subject, and it was introduced as an attribute of a phenomenon that was discussed through "representation". From the late 18th century, with the advent of the "individual taste" system, different ideas had emerged based on "subjectivity".

In the post-Kant period up to 1960, a change in the human-architecture relationship occurred through a movement from the manifestation of the human body to body abstraction in architecture, due to the industrialization of construction, and a special value was created for "mathematical beauty." In modernism, the only thing that remained unchanged was reliance on a mathematical system based on human proportions, i.e. an approach that transformed the aesthetic thinking of "supernatural imagination" into "mere laws". As stated, in classical aesthetics, "imagination" was adapted to the elements of architecture through the human body and the "Vitruvian" pattern was developed to materialize such imaginations in the form of proportions. But in modernism, this imagination, i.e. the representation of metaphor and allegory, disappeared and was converted into mere proportions combined with geometry and mathematics, and the "physical aesthetics" eventually shaped a kind of rational hybrid technique of beauty by, relying on mathematics.

This complexity began with the design of the proportions of the "Vitruvian pattern" in the Renaissance, and eventually created a "hybrid technique" of purely geometrical beauty that underlay the human body-based aesthetics in modernism, until Le Corbusier proved the existence of architectural beauty only by geometric theorems. That is, modernism had a hostile relationship with the human body and nature, both of which are organic, and he was the only one seeking an anthropocentric proportional system, i.e. "modular". Functionalist architects were concerned with neglecting the relationship between body and architecture and they only cared about the pragmatic relationship between human organs in architecture from the perspective of aesthetics. In this movement, honoring the metaphor of "machine", as a general pattern of beauty, caused the rejection of the human body from architecture. Most modern architectural beliefs emphasized the physiological features of human organs based on the "human organ model", thus limiting all human needs to universal and physiological needs. (Fig. 1)

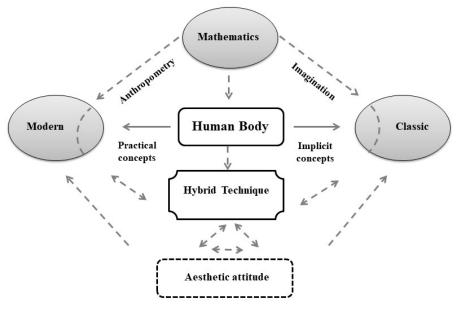


Fig. 1. The Aesthetic Attitude in the Classic and Modern Architecture

However, with the advent of physiological and psychological theories, special attention has been gradually paid to the human qualities, perceptual senses, and their role in the "architectural experience"; so that from that time onward, the rejection of the human body by modernism became one of the issues facing postmodernism; because, despite technological advances, the symbolic representation of human position was reconsidered one of the architectural tasks. In postmodern architecture, returning to the human and giving more importance to his "presence" transformed architecture into a spatial-empirical Armanshahr Architecture & Urban Development

case through "physical perception", which paved the way for the establishment of a different humanarchitecture connection. The aesthetic connection with conventional criteria, based on the human body, or the presentation of a certain function, completely disappeared and what remains is the emphasis on the "presence" of humans through conscious perception. As a philosophical discipline, "phenomenology" based on the concepts of empathy raised in architecture in the 19th century, overwhelmingly addresses the issue of interaction between humans and architecture, and introduces a new and related approach that could be considered from the perspective of aesthetics (subjectbody). This approach focuses on the experiencing person and pays attention to the impact of buildings on human beings, contrary to the traditional tendency of the past that was focusing on the experienced object (Table 4).

Table 4. Architectural Aesthetic Paradigms from the Beginning to Now					
Period of Time	Architectural Aesthetic Thinking System	Architectural Beauty Concepts	Aesthetic Paradigms		
Ancient Period BC	Objective/ Metaphorical Aesthetic Thinking	Representational beauty Reflection of the metaphysical order	Classical aesthetics		
Middle Ages	Objective / Idealistic Aesthetic Thinking	Spiritual beauty through the concepts (with(divine source)) induced to spatial characteristics	(Objective / subjective perception)		
Renaissance	The Growth of Objective Cognitive Aesthetic Thinking	Exploratory beauty through the mathematical order	Classic aesthetics (Visual perception)		
18th and 19th Centuries	The Emergence and Development of Subjective Beauty	The beauty of the process of cognition through senses, perception and sensory knowledge The principle of impartiality Subjective pleasure Concept of picturesque artistic nature	Experimental Aesthetics (Subjective perception)		
Modernism	Materialistic Aesthetic Think- ing and Mathematical Beauty (Gestalt and Formalism Theories)	The analysis of formal features, form-related patterns and how the phenomenon is combined (part-whole relationship)	Engineering aesthetics (Visual perception)		
Post-Modernism	Emergence and Development of the Concept of "Aesthetic Experience"	Aesthetics as the process of recognizing judgments and evaluating environmental features and environmental experiences to strengthen the connection between human and architecture	Aesthetic experience (Qualitative perception)		

#### Table 4. Architectural Aesthetic Paradigms from the Beginning to Now

Armanshahr Architecture & Urban Development Volume 15, Issue 38, Spring 2022

Architectural aesthetics was initially a branch of philosophy and in the 18th century, it was defined as the "contemplation theory" in judgments with a focus on the "nature of beauty" and its relation to perception. However, consistent with the aesthetic aspects, it has shifted its focus in the contemporary era away from philosophical grounds to aroused emotions.

At first, the connection between architecture and man was considered to be within the framework of experiencing a "universal harmony" that determined the proportions of the human body and the beauty of architecture and was a continuous conception throughout history until the era of postmodernism. Thereafter, the "metaphorical conception" of the body, which is "the structure of a body," emerged. That is, human beings imagined themselves within a combination of building forms through a sympathetic process. At the same time, there is also the notion that human beings experience the world not as a building, but through the window of a "building"; and a building is a tool to experience the world in a new way and beyond the biological limits of the body (Hill, 2017, p. 100).

The form and implicit meaning of architectural aesthetics are represented by a phenomenological approach to how the human body encounters the environment and the full presence of sensorimotor senses in dealing with architecture as an "existential" reality, which is accompanied by an emotional reaction of the audience and the creation of an "aesthetic experience" through this kind of bodybased perception. This means that the aesthetic nature of architecture is now being sought not in the object itself, but in the "human experience" (subject). Therefore, an architectural work can be the basis for an aesthetic experience through being experienced by human beings in their perceptual scope. Now, unlike the classic and modern eras, architecture is not separate from humans, but the nature of beauty is derived from the theme of "interaction" between architecture and humans, which is resulted from the connection between body-based perception and "place"; and the result of this interaction is the perceptual experience of space, represented as an aesthetic experience, causing the sense of place, the mental image, the memory of the place and the implicit concepts associated with it.

Thus, from the Classical era onwards, the metaphorical aesthetic meaning of the process by which the aesthetic criteria of architecture were created based on the human body, gradually transformed into an ambiguous matter, and the human body-inspired form of beauty experienced a complex process. Consequently, in modern architecture, with the disappearance of the "implicit meaning" of beauty, the rationality of beauty was gradually increased, while the perceptual aspect of architecture declined. This was restored in the postmodernist architecture; because aesthetics was considered to be a kind of knowledge received through the study of experience and perception, and the experience of beauty was related to the "experience of the place". Now, beauty influences a wide range of human emotions (excitement and motivation), and the qualities of beauty can be recognized through "Perception by presence". In other words, the aesthetic experience implies an empathic interference that embraces the physical responses of the observing person. Therefore, the "emotional experience" derived from the perceptual discovery of architecture which is

manifested through the "presence" of man creates the feeling of "empathy" that paves the way for the sense of beauty.

It can be argued that the concept of architectural aesthetics emphasizes that human beings are not separate from architecture but are part of the whole, organized, and related. The Intertwined human and architecture make the aesthetic experience a general feature; it requires more focus on some of the architectural aspects of a building among humans and its experience. The essence of the experience is perceptual aesthetics and other non-intangible factors such as cognition and knowledge complement and influence this experience. hence the architectural aesthetic experience is a kind of active interaction between objectivity and imagination.

Now, the form and content of architectural aesthetics largely depend on the form and content of the physical structure of the building. These elements must appear in the final analysis of the essence of the beauty of architecture. The building consists of two main elements: physical structure and spatial dimension. The latter exists as a potential in the physical structure. This dimension becomes real only when a building is formed as an "experience" of organic unity. In this kind of experience, the distinction between the structure and the spatial form disappears and seems to be a "sense" element of the building as well as a spatial dimension in the aesthetic experience. Nevertheless, this formal identity may include three distinct types of elements: (1) The structure or content based on the material factors of the aesthetic experience; (2) The spatial form or spatial dimension of the aesthetic experience; and (3) The aesthetic quality or semantic dimension in the aesthetic experience, i.e. the discovery of the richness of aesthetic quality based on the sensual pleasure that manifests itself in human consciousness and experience (Fig. 2).

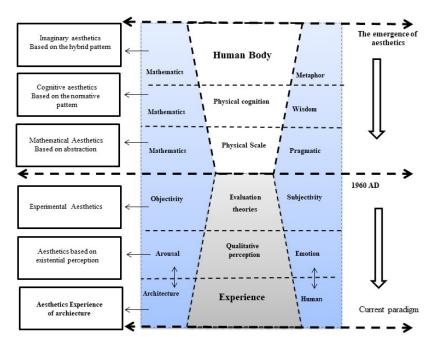


Fig. 2. The Evolution of the Systems of Thought in Architectural Aesthetics from the Beginning to the Present

#### 5. CONCLUSION

Each of the dominant theoretical views (classic, modern, and postmodern), from the beginning up to the present time, have addressed one or a few interrelated dimensions of architectural aesthetics from the humanistic perspective. The transcendental approach to the human body was highlighted in the classic period and the cognitive approach to the dimensions of the human body was emphasized in the Renaissance. Furthermore, the mathematical approach to the human body was emphasized in the modern period and the neglect of the human body in architecture was criticized in the postmodern era. The current paradigm in architectural aesthetics, which focuses on the anthropocentric view, could be seen as a theory on "experience" The function of this paradigm has shifted from the focus on structural and spatial elements to a complete range of human perceptive experiences. The perceptions of architectural aesthetics can present an experimental background of aesthetic judgment and aesthetic preferences are the result of a cognitive-emotional process that could be justified through the central role of human experience.

Therefore, this study has attempted to examine the ontological and epistemological development of architectural aesthetics with an anthropocentric approach by reconsidering the historical development of systems of thought. In other words, the advantage of this discussion is emphasizing the integrity of space and human experience from the view of "embodied experience" with a comprehensive approach instead of focusing on architectural elements through bodily interpretations regarding humans. In this respect, the purpose of introducing the conceptual model was to create an integrated framework in order to show the ways individuals react to objective/subjective characteristics of the environment, synthesize these reactions into emotional understandings, and then interpret these understandings as a form of overall aesthetic judgment of architectural works (Fig. 3).

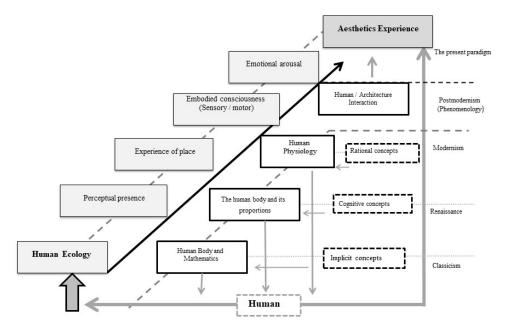


Fig. 3. The "Architectural Aesthetic Experience" Concept Formation Process

In fact, architectural aesthetics seeks perceptive experiences of space and the consequent satisfactory feeling based on the system of thought stating that beauty is obtained as a theme from the interaction between humans and architecture through the unification of "embodied perception" (the amalgamation of phenomenology and perception psychology) and the place. According to this theoretical structure, for having an aesthetic judgment, humans need to "experience" architecture based on the judgment. The human experience of architecture is not simply able to describe an independently real thing with a fixed degree of evidence. Therefore, it must be possible to create a unified whole from interrelated agents in order to perceive architecture in a holistic context. As a result, the "embodied experience" of architecture plays a crucial role in human recognition, evaluation, and preferences since such an experience simultaneously emphasizes the reality and imagination in human living space. The main outcome of holding such a viewpoint towards the concept of architectural aesthetics is the possibility of human cognitive development, i.e. perceptive/emotional function resulting from dynamic interaction with architecture, which is achieved through the simultaneous accumulation of emotion,

cognition, and the consequent excitement. Such an approach promises a deep action that is begotten by

aesthetic judgment through acquiring experimental insight (Fig. 4).

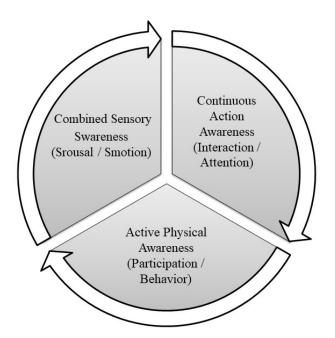


Fig. 4. The Structure of the Aesthetic Experience of Architecture as the Current System of Thought

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# 131

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