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Article

Empathy theory as an early trace of experience in architecture

Behiyye YILMAZ*10, Muzaffer Tolga AKBULUT20, Yusuf CİVELEK20

¹Department of Architecture, Yildiz Technical University, Istanbul, Türkiye ²Department of Architecture, Fatih Sultan Mehmet Vakif University, Istanbul, Türkiye

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ABSTRACT

This study claims that the concentration on the spatial experience in Modern architecture is related to the "einfühlung/empathy theory." The empathy theory emerged in Germany as an attempt to explain the psychological mechanism of identification with visual phenomena during the second half of the nineteenth century. Later on, Worringer introduced the concept of abstraction as the opposite of empathy. According to him, the need to overcome feelings of distrust and fear toward the world resulted in art removing the naturalistic/figurative, i.e., empathic, elements from the object. This paper aims to show the early connections between empathy and abstraction in Modern architecture.

It is claimed here that "abstraction," an indispensable property of Modern art and architecture, facilitated the modern spatial experience by emphasizing movement within the boundaries of volumes. In other words, abstraction became the new means to empathize with the object, thus eroding the opposition created by Wittkower. The erosion between the boundaries of empathy and abstraction became part of the phenomenal and literal "transparency" in twentieth-century architecture due to its reliance on the experience of engagement with forms, either physically or mentally.

Finally, the study intends to contribute to the field of Modern architecture aesthetics by starting a discussion on how the modern emphatic experience of space might be at the root of the latent phenomenological approaches in architecture, which surfaced during the second half of the century as a reaction to both the copy-paste productions of Modernism and the superficiality of Postmodern currents.

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INTRODUCTION

When the early traces of "experience" in architecture are questioned, it is seen that this concept is closely related to art. As is well known, classical art is based on beauty and is subject to specific measures such as ratio-proportion and symmetry. In the early 18th century, changes began in

the classical understanding of art. In his essay "A Treatise of Human Nature", Hume (1739), Hume (2007) makes statements that challenge the existing understanding of the art of his time. According to him, the distinctive feature of beauty is that it gives "pleasure and satisfaction to the soul. "In another essay entitled "Of the Standard of Taste" (1757), Hume presents ideas that do not conform to the classical

^{*}E-mail adres: behiyyey@gmail.com



^{*}Corresponding author

understanding of art. Hume's understanding of art is based on "emotion," "the common feelings of human nature," and "experience" rather than the qualities inherent in the object of art object of art (Hume, 1985).

Similarly, Burke (1757) distinguishes beauty from the classical understanding of proportion in his text "Inquiry into the Origin of our Ideas of the Sublime and Beautiful". He claims that beauty has no connection with calculation and geometry. Instead, the sensory and emotional approach and the idea of sublimity are elements of the new approach to art. According to Wittkover (1949), this new understanding of art frees the architect from the limitations of mathematical proportions.

By the 19th century, with the influence of the establishment of modern psychology and psychophysics, art became linked to the "subject" and was read through the subject's impulse. Fechner, considered the founder of psychophysics, questioned "Why is something pleasing or unpleasant? And to what extent is it pleasing or displeasing?" (Tunali, 1975). Fechner's interrogation reveals that aesthetics and philosophy of art began to be included in psychology in the mentioned period. As a matter of fact, in this period, the beauty of the art object is tied to the subject's taste.

Theodor Lipps, one of the principal founders of modern psychological aesthetics and art theory, used the term "Einfühlung theory" to explain the evaluation of the object through the subject's taste. Lipps's definition of aesthetics signifies a change in the concept of beauty which becomes a subjective judgment: "Aesthetics is the science of the beautiful. An object is called beautiful because it evokes or can evoke a special feeling in me. Accordingly, beauty is the ability of an object to evoke a certain effect in me." (Tunal, 1975). In other words, Einfühlung means the subject's pleasure through the object by projecting itself onto it.

The term "Einfühlung theory," which is translated into English as empathy theory, first appeared in the book "Über das Optische Formgefühl" written by Robert Vischer in 1873 (Otero-Pailos, 2010). With the term *Einfühlung* theory, which literally means "feeling oneself" or "stimulating" something, Vischer suggests that we neurologically stimulate our physical environment during our perceptual activity. In Vischer's definition, in the case of visual arts, while the eye perceives the artwork, the body's perceptual response to form and content constitutes the first step of empathy theory; then, as these sensations deepen into emotions and empathy, our self, in modern terms, merges with this "phenomenal" object. In other words, according to Vischer, empathy theory means the individual's reflection of himself in artistic form. In Vischer's words: "We thus have the wonderful ability to project and incorporate our physical form into an objective form, in much the same way as wild fowlers gain access to their quarry by concealing themselves in a blind" (Mallgrave & Ikonomou, 1994).

According to Mallgrave & Ikonomou (1994), Vischer's conception of empathy theory is that the individual retains his or her appearance and identity only out of habit. Although there is a separation between the individual and the object, the mental representation of the object and the individual merge. If the object is considered as tiny as a pebble, the representational feeling shrinks, the self is weakened, and contractive feeling occurs; if the object is considered as significant as a sea, the self is strengthened and liberated, and expansive feeling occurs (Mallgrave & Ikonomou, 1994).

Theodor Lipps, another empathy theorist, adopts the empathy theory as a kind of inner stimulation. In Lipps' view, as in Vischer's, there is a state of integration with the object, reflection on the object, and leaving one's own "bodily and sensory" awareness behind. For example, according to Lipps, when we watch a dancer, we feel as if we are making the movements she makes; we become one with her movements, and we evaluate this experience as a reflection of our power. "In a large hall, for instance, we "expand" our chest with the room's dimension and breathe more easily. A Doric column, the parts and fluting of which compose a complex and lively structure, makes us happy because it allows us to stand tall and revel in our strength" (Mallgrave, 2013).

Heinrich Wölfflin, another empathy theorist who explored how architecture affects emotions and moods, in his essay "Prolegomena to a Psychology of Architecture", does not, like other aesthetic theorists, embrace the idea that our selves are reflected in architectural forms but the reverse (Mallgrave, 2013). Instead, he advocates experiencing form through the body as architectural objects: "The optic nerve directly stimulates the motor nerves and thereby sympathetically works on our internal organs." According to him, while we perceive the narrow houses of Northern European cities as oppressive, we perceive Italian Gothic forms as "restful because they are horizontal and wider" (Mallgrave, 2013).

August Schmarsow, on the other hand, opposes Wölfflin's prioritization of form and rejects the formalist aspect of architecture. As Mallgrave (2013) puts it, Schmarsow defines architecture "as a "spatial construct" built around the phenomenological human axis." (Mallgrave, 2013). In other words, he considers the sense of space surrounding the subject as a more important phenomenon than form.

Among the empathy theorists, Schmarsow is the one who most clearly applies the theory to architecture. According to Panin (2003), although the idea of space has been around since antiquity, it has only started to be included in architecture since the late 19th century with Schmarsow. This concept first passed through aesthetics and then was added to architecture. Therefore, the idea of space emerged as a concept produced by aesthetics while trying to define

emphatic experience in art forms. Moreover, the idea of space led to the search for the aesthetic in the successive effects rather than the static envelope. Again, in Panin's words, "space was accepted as the embodiment of human activities within the stylistic shell." (Panin, 2003).

These shifts in aesthetic theory—from Hume's emphasis on subjective pleasure, to Burke's notion of the sublime and affect, and Fechner's psychophysical explorations—collectively reveal a gradual transition from object-centered beauty to subject-oriented affective experience. Each of these positions shapes aesthetic judgment increasingly through the lens of sensation, perception, and emotion. As such, the idea of "experience" becomes internalized, setting the stage for *Einfühlung* theory (empathy theory), in which the perceiving subject is no longer separate from the object but projects itself into it. This empathic merger of subject and object constitutes the defining moment of a centurylong shift from rationalist aesthetics toward embodied, psychological participation in art.

Therefore, this study assumes that the conceptualization of experience in architecture begins with the emergence of empathy theory. This theory laid the groundwork for understanding space not as a static form, but as a phenomenon shaped by the subject's embodied perception and emotional engagement.

To summarize, the idea of the sublime, the first trace of the aestheticization of "experience" in art, developed into empathy theories around the turn of the twentieth century. This article explores how empathy theory (*Einfühlung* theory), originally developed in psychological aesthetics, laid the conceptual foundation for the spatial experience of modern architecture, particularly through its connection to abstraction and bodily experience. It can now be argued that these theories resulted in the perception of architecture as abstract volumes around flowing spaces to be experienced emphatically by the subject.

EMPATHY THEORY AND MODERN ARCHITECTURE

Reflections of Empathy Theories in Modern Architecture

To trace the reflections of empathy theories on the plane of architecture, it is helpful to examine first the idea of spatial movement in the thought of Adolf von Hildebrand, a sculptor influenced by the theories of Robert Vischer and Theodor Lipps. Hildebrand, who first built his theory on painting and sculpture, says the following about space in his book "Das Problem der Form in der bildenden Kunst" written in 1893: The main task of the artist is to design layered planes that create the effect of depth, where spatial values can be perceived from front to back. According to him, for the eye to develop the effect of volume, the whole must carry spatial clues that require a two-dimensional effect. In this formation, which he refers to as relief, art

consists of the combined effect of two-dimensional images and a series of three-dimensional movements that give the effect of depth. The sculptor and the painter must consider the dynamic relationship between two-dimensional values and kinesthetic ideas that evoke depth and volume (Figure 1) (Mallgrave & Ikonomou, 1994).

Hildebrand then extends this idea of relief to painting, architecture, and furniture. In architecture, according to him, the idea of relief effects combined with form was achieved in the Greek temple (Figure 2): "What we perceive is not a spatial body fronted by columns: the columns form part of the spatial body and our ideal movement into depth passes between them." (Mallgrave & Ikonomou, 1994).

According to Mallgrave & Ikonomou (1994), Hildebrand's incorporation of visual perception and movement into the conception of space reappears as a central idea in Schmarsow (Mallgrave & Ikonomou, 1994).

It would be helpful to revisit Schmarsow's idea of space in terms of these parameters. Schmarsow summarizes his ideas about body and movement in the following words:



Figure 1. "Hunt of the Amazons" is an example of relief from 1887/88, Adolf von Hildebrand, Neue Pinakothek, Munich (Gwyneth Thompson Briggs, 2019).



Figure 2. Temple of Hera (Oliver-Bonjoch, 2010).

"The less we are willing to behave like exclusively visual beings and be satisfied with only one viewpoint, the more freely will we make use of the change of position to grasp the material individuality of the object from as many sides as possible" (Mallgrave & Ikonomou, 1994).

These statements show that Schmarsow treats movement as an essential factor constituting the third dimension. Schmarsow's position can be better understood through his critique of the ideas of Alois Riegl, who, like Schmarsow, considered the "creation of space" as a constitutive element of architecture. Riegl argues that from early antiquity to the late Roman period, there was a shift in architecture from tactile to optical vision. This claim implies that the individual has tactile or "near vision" in the Egyptian pyramid, "normal vision" in the Greek temple, and "distance vision" in the Roman Pantheon. Schmarsow criticizes this idea regarding how Riegl deals with human perception in space. According to him, Riegl imprisons the human being an observer in a fixed point of view. Moreover, he deprives the perceiving subject of the freedom of movement that enables it to experience space through its sensation of objects (Mallgrave & Ikonomou, 1994).

In his book "Grundbegriffe der Kunstwissenschaft: am Übergang vom Altertum zum Mittelalter," Schmarsow considers art as a creative reconciliation of man with the world in which he has been placed. The elements of human anatomy that enable this mediation are "our upright posture, our eyes, arms, legs, and frontal orientation." He says we achieve our three-dimensional experience of space and psychic awareness through these. Another parameter related to the movement and the body involved in the experience of space is direction. While relating the "human subject, which constitutes the center of the phenomenal world" to space, Schmarsow considers the human being as an "upright body." However, the emphasis on space is not on the vertical axis. Since Schmarsow's understanding of space creation is based on enclosure, depth is more important than height in directional movement through space. According to him, we shape space with the orientation of our body and limbs. This situation, defined as forward movement, is the factor that transforms the spatial enclosure into a living space (Mallgrave & Ikonomou, 1994). In other words, the moving body is one of the primary elements that establish space.

A similar thought can be seen in Henry David Thoreau's text "Walking". Thoreau emphasizes that walking is not merely a physical movement, but a holistic experience where body and soul are aligned: "The thought of some work will run in my head and I am not where my body is, -I am out of my senses. In my walks I would fain return to my senses (Thoreau, 1862). In this context, walking is not just a physical displacement, but a way for the body and self to reorient towards space and existence. Such a body–space relationship forms the basis of empathy theories in architecture.

The idea of the moving body, which emerged from empathy theories in architecture, has had different direct and indirect reflections in modern architecture. Its direct reflections are the making of the idea of volume felt while constructing the space. Indirect reflections arise due to the evolution of the concept of empathy theory into abstraction. The direct impact of empathy theory in architecture can be seen through Adolf Loos' raumplan principle.

From Empathy Theory to Raumplan

Adolf Loos's raumplan principle reflects the result of the 19th-century tradition of spatial thinking in architecture from Semper to Schmarsow (Panin, 2003). In a Loos building with the raumplan, the body goes through an empathic experience as it travels through volumes of different dimensions and character.

In the Four Elements of Architecture, Gottfried Semper correlates the two types of wall construction - wooden framework (die Wand) and massive blocks of earth or stone (der Mauer) - for the birth of an extended-lasting spatial paradigm of architecture. Semper claims that the wooden framework functioned as the support for the textile clothing (bekleidung) for protection, of which the effects were imitated on surfaces of masonry constructions as ornamentation. Therefore, for Semper, the representation of the warm and homely envelope (the mat, the carpet) on durable walls dominated the spatial configuration in architecture. In his text, The Cladding Principle, which shows the influence of Semper's bekleidungstheorie, Loos describes a situation in the beginnings of architecture in which the architect aims to create a warm and livable space. He claims that some architects chose to respond to this problem by laying carpets - a warm element - on the floor and the walls. So, the architect needed to construct a structure to hang the carpets on the walls. Therefore, Loos says that the first purpose of construction in this method is to produce the cover, which is necessary for protection, and then the walls (Loos, 2017). Loos states that there is another style of construction, which is building the walls first, so the space inside the walls becomes the room. Then, they cover the interior surfaces of the room with a suitable material. However, Loos supports the idea that the architect/artist should design first the effect he wants to evoke and then decide on the materials and the forms of the space to produce that effect (Loos, 2017). However, his well-known article "Ornament and Crime," as well as his built works, prove that Loos accepts Semper's thesis as historical facts but disregards- even confronts - them for the sake of a new spatial paradigm suitable for the modern, civilized people. There is more than a reasonable doubt that Loos' raumplan (Figure 3) is related to Schmarsow's attempt to associate empathy theory with psychological stimuli produced by architectural space (raumgefühl) and its intentional reapplication in design (raumgestaltung).

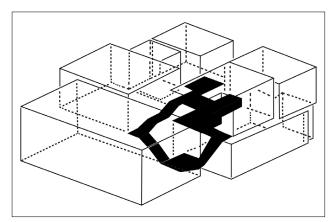


Figure 3. Raumplan diagram. Redrawn by the author based on a drawing of Adolf Loos's Villa Müller (Villa Muller, n.d.).

Another similarity between Schmarsow and Loos is their search for the meaning of the building within the space. According to Schmarsow, seeing a building does not only mean seeing its form; his theory is about an "aesthetic from within." When looking at a building, one projects one's body onto it and takes one's bodily meridian as the central axis of the projected center. Therefore, Schmarsow states that we understand a building better by observing it from the inside (Mallgrave & Ikonomou, 1994). Loos is also known to have shaped his spatial fiction through the interior space.

In short, the direct impact of empathy theories in architecture can be understood through the raumplan principle, which means designing the space. This principle, rooted in the psychological and spatial empathy theories, signifies a shift from decorative or symbolic approaches in architecture toward an experience-centered spatial organization. In Loos's *Raumplan*, the body is not a passive observer but an active participant navigating through differentiated volumes. The sequence of movement through space becomes an architectural narrative, reflecting the core idea of empathy theory: the subject's psychological engagement and projection into spatial form. Therefore, *Raumplan* can be seen as a built expression of the empathic bond between body and space.

THE EFFECT OF EMPATHY THEORY ON MODERN ARCHITECTURE THROUGH ABSTRACTION AND MODERN ART

Empathy Theory and Abstraction

Empathy theory is a concept that has influenced modern art, primarily through its peculiar intermingling with its alleged opposite, abstraction. Worringer has a significant role in making abstraction the basis of modern art by bringing abstraction against the empathy theory. In Worringer's view, empathy theory is a condition within naturalist styles. The happy union of man with nature is represented in art as

naturalism. Just as the subject derives pleasure from nature, it also derives pleasure from an art object representing the harmonious union of human beings with nature. At this point, Worringer questions the encompassing and inclusive nature of empathy theory (Tunali, 1975) and finds the objectified self-enjoyment (Objektivierter Selbstgenuss), which is the essence of theory. Worringer defines "objectified self-enjoyment" as enjoying ourselves through an object (Worringer, 1907). However, while empathy theory can explain "Greco-Roman and modern Western art," it is not possible to understand, in other words, to empathize with other artistic traditions. Therefore, alongside one's "selfenjoyment" with the object, Worringer also sees in the work of art a mental process based on the principle of abstraction. Contrary to widespread ideas that see the origin of art in a mimetic impulse and ornamentation, Worringer attributes the origin of art to human psychological needs (Helg, 2015). Eventually, the primeval origin of art traced in non-European art and the means to recuperate its essence become frequent themes connected with Worringer's theory.

According to Vallier, Worringerian abstraction aims to transcend reality, which is only possible through abstraction. Therefore, abstraction is a starting point for modern artists (Bonfand, 2015). Cézanne, one of the first artists to mention abstraction, considered abstraction in his late age as the absence of the contours of objects, but instead as "sensations of color that give light" (Chipp, 1968). The object is now expressed in color without contours, and the result is "the impression of massiveness and material substance" (Merleau-Ponty, 2019). According to Kandinsky, abstraction can be said to be an inner experience. Indeed, the relativity of the act of seeing, the impossibility of reliving the same experience of seeing, forms the basis of the idea of abstraction. Accordingly, an object is represented in color as we see it as a new object each time. Eliminating the relativity of our gaze and seeing the object as color is a method of abstractionist attitude (Bonfand, 2015).

It can be said that the theories about empathy and abstraction emerged from investigations on the relationship between the senses and psychology vis-à-vis visual phenomena as two critical concepts in the quest to revitalize European art at the beginning of the twentieth century. These interacting theorizations facilitated the remolding of various influences from non-European art in European art, like those that had appeared prematurely in the works of artists like Van Gogh, Cezanne, and Gaugin.

Even though Worringer constructed an opposition between empathy theory and abstraction, his theory suggests that empathy, as self-enjoyment with the object, is possible not only in natural but also in abstract forms. The psychological themes in non-figurative paintings prove the existence of empathic impulses in Modern Art, such as those found in Kandinsky and Klee.

For Worringer, abstraction is the "first artistic impulse." He thinks that the primitive man, fearing the complex and ambiguous structure of the world, resorted to abstraction. However, despite its resemblance to the archaic one, modern abstraction differs from it in terms of forms and methods of manifestation. Because modern man is no longer helpless in the face of the world, he uses abstraction to express his reason, not his instinct. Moreover, the abstraction that modern man produces becomes a form of artistic production that emerges not from the collective instinct of a population but from an individual's world of thought. Ultimately, modern abstraction emerges not out of fear of nature but from an understanding of being liberated from the world (Helg, 2015).

Abstraction in Modern Art

It is vital to reveal the dynamics that led artists to abstraction in the formation of Modern Art to elaborate on the role of empathy theory/abstraction in Modern Architecture. The main idea behind using abstraction in Modern Art is to handle reality differently. The first reflection of the idea of abstraction in Modern Art is in the impressionist attitude. According to Tunalı (1970), every art movement is based on how the subject, the artist, reflects the object in the work of art. The pre-modern artist (subject) establishes a thought-based relationship with his object and creates his work based on what he sees and thinks. However, in Impressionism, which is the beginning of Modern Art, the subject establishes a relationship with his object through his senses. The subject reflects the impressions left on him by the objects and nature in his work. Therefore, the reality of Impressionism is "a mixture of impressions and sensations." (Tunalı, 1970).

In modern art, abstraction emerged as a deliberate stance against figuration, either by gradually abstracting forms found in nature or by directly employing fundamental shapes. The primary tools of abstraction are geometric form and pure color (Bonfand, 2015). In the process of the dissolution of figurative representation, objects are fragmented and reassembled, depth is reduced, the hidden grid comes to the fore, and the painting becomes geometric with straight instead of curved lines (Rowe & Slutzky, 1963). According to Tunalı (1970), the artists' searches in abstraction are similar to the subjects of the philosophy of their period, namely phenomenology. Phenomenology is expressed as grasping the essence by bracketing "the accidental and the individual" and therefore shares abstract art's goal of searching for "the essence, truth, and the universal." (Tunalı, 1970)

In ontological interpretations of modern art, abstraction is not a rupture from being, but rather a mode of expressing it on a different plane. Even in non-figurative paintings, Being reveals itself. Moreover, everything that is visible carries a trace of Being (Merleau-Ponty, 2019). In other

words, in this new conception of art, reality is sought not on the visible surface of nature but beyond it. The new understanding of reality means searching for the depiction of the "pure reality" beyond the visible. Thus, the essence of phenomena is sought in abstraction (Tunali, 1970). Similarly, the transition from Cézanne to Cubism, which marks the beginning of abstract art, demonstrates that abstraction in Modern Art was not a severance from reality, but a reconstruction of it through a new spatial logic. Artists like Picasso and Braque fragmented the volume of objects using small surface planes (facet-planes), aiming both to define the object's volume and to preserve the flat integrity of the canvas. In doing so, they distanced themselves from traditional representational techniques and developed a new abstract visual language that redefined depth and form (Greenberg, 1989).

Another critical parameter in the transition to abstraction in art is the disappearance of "perspective" in painting, which enables the perception of space without the limitations of depth, width, and height of the Euclidean geometry (Yılmaz & Ödekan, 2009). With the introduction of non-Euclidean geometry comes the fourth-dimension theory, which, in contrast to the current linear perception of time, allows a new spatial perception of time in which the past, present, and future coexist (Yılmaz & Ödekan, 2009). According to Yılmaz & Ödekan (2009), the non-perspectival representation is the main connection within the avant-garde circles leading up to the emergence of suprematism in abstract art.

Florenski's text "Die Umgekehrte Perspektive" is essential in understanding this change. He defines reverse perspective as a multidirectional mode of representation, contrasting it with perspective, which he associates with "subjectivism and illusionism." According to him, the perspectival structure reflects the individual's subjective experience of seeing. Rather than expressing objective or metaphysical views rooted in religious traditions, perspective reduces vision to individual observation. Therefore, rejecting perspective aligns with a preference for "religious objectivity and a transpersonal metaphysics". Florenski argues that perspective is restrictive because it is grounded in Euclidean geometry and Kantian thinking. It forces the artist to adopt a fixed, absolute viewpoint-typically the optical center of the right eye. As the observing eye does not move, the world is rendered from a single static point, like a camera obscura, producing a "still and unchanging" reality (Florenski, 2021).

Furthermore, vision in this system becomes mechanical, excluding psychological and spiritual dimensions. Thus, perspective does not offer an accurate representation of reality, but rather a limited, subjective interpretation. He also suggests that although perspective and Euclidean principles were known in the Middle Ages, they were

consciously adopted only after the secularization of the Christian worldview. The Renaissance shift from divine to naturalistic representation would not be challenged until the late 19th century, when abstraction began to reject perspective, depth, and naturalism. Florenski's position, while metaphysically grounded, is part of a broader critical discourse on representation, which is expanded by Merleau-Ponty's phenomenological reading and Panofsky's historical-symbolic analysis (Florenski, 2021).

Merleau-Ponty states that perspective is not merely a visual system, but also a conceptual construct that governs how thought perceives the world. According to him, perspective organizes appearance around a fixed viewpoint; thus, being is no longer a multiple and layered phenomenon but is reduced to a singular visual object. This critique aligns with Florensky's view of perspective as a system that replaces the divine with the individual observer. According to Merleau-Ponty, the pursuit of accurate representation often distances things from their reality, because perspective operates in a space shaped by thought's intentions. In this context, the represented world is no longer experienced, but becomes a plane mentally constructed (Merleau-Ponty, 2019).

While Florensky opposes the representational system of perspective by advocating a multidimensional and metaphysical perception that opens toward the immanence of being, Panofsky conceptualizes this structure as a secular and mental representational order (Panofsky, 2021). In this context, although approaching from different angles, both Florensky and Panofsky acknowledge that representation is a limited and conceptually constructed structure.

Tunalı, claims that these changes in art resulted from the changes in the artist's perception of man, the world, and God (Tunalı, 1970). As stated before, abstract art was formed to reach "pure reality" beyond the sensible reality. The abstraction, which is considered to have started with Cezanne, influenced the later avant-garde artistic movements such as Cubism, De Stijl, and suprematism. The concept of abstraction became more visible at the Bauhaus School, where the aesthetics of modern design was directly based on Modern Art.

The Gestalt Theory and Bauhaus School of Architecture

It is known that empathy theories influenced the masters of the Bauhaus school in relation to the Gestalt Theory. In particular, Johannes Itten, Wassily Kandinsky, and Lázló Moholy-Nagy adopted Lipps' theory of empathy and the ideas of Wolf Dohr and his student Émile Jaques-Dalcroze, who studied the coordination of "body and brain" at Hellerau under Lipps' influence. Marianne Tauber, who works on these connections between Bauhaus and the Gestalt school, states that Gestalt psychologists were invited to the Bauhaus School to lecture on the theory of perception, and a seminar was given on this subject. Moreover, she mentions

that a student of Paul Klee, a Bauhaus lecturer, found in his lecture notes expressions belonging to Wertheimer, one of the founders of Gestalt psychology. Klee utilized the visual illusions found in the books of psychologists and philosophers influenced by Gestalt psychology and empathy theories to develop his understanding of abstract art, which he adapted to his lectures (Van Campen, 1997). In Itten's studio classes, students were encouraged to gain a natural rhythm through body movements before painting and designing. Itten's other method that supports bodily movements involved the whole body in artistic production by stimulating the tactile senses. He encouraged bodily participation in design through the different types of materials that the students experienced with closed eyes (Mallgrave, 2013).

In his book "On the Spiritual in Art" Kandinsky (1946), a Bauhaus lecturer, states that beyond the physical effect on the act of seeing, colors and lines evoke a "psychic effect" through a "spiritual vibration." In his lectures at the Bauhaus, Kandinsky adopted a method of art science, the foundations of which he laid in his book "Point and Line to Plane" (Kandinsky, 1926). In this book, he states that horizontal lines are cold and vertical lines are warm. According to Mallgrave (2013), Kandinsky's empathy theory lies at the root of the sensory qualities attributed to the types of lines in this book and his subsequent interest in Gestalt Psychology (Mallgrave, 2013). It may be worthwhile to note that Kandinsky and Lipps worked in Munich around the same time. According to Van Campen (1997), Lipps' work on the "psychological analysis of abstract forms" influenced Kandinsky's art theory. He claims that the science of art that both Lipps and Kandinsky worked on is based on perceptual experiments to understand the creative powers of human consciousness by utilizing the different positioning (configuration) of lines and points on the plane. Accordingly, in his Bauhaus classes, Kandinsky taught his students how to investigate the visual forces generated by the different positioning of primary forms. Kandinsky aimed to establish general rules of art through these visual experiments (Van Campen, 1997).

Moholy-Nagy, another Bauhaus teacher, architecture in his book "From Material to Architecture (1929) uniquely as the art of "spatial creation," which the architect can achieve "only through the most profound understanding of human life as a total phenomenon within a biological whole" (Mallgrave, 2013). He began his lectures with exercises where students could experience the nature of materials. Moholy-Nagy considered the human biological structure as the basis of design (expression). According to him, man's experiences are created by his senses, and the psychological effect of an experience is the basis of man's relationship with the object. Therefore, the empathic experience constitutes the material basis of art (Mallgrave, 2013).

What the artists, especially those engaged in abstract painting, did in this period was not limited to integrating existing research on the psychology of visual perception into their work, but they also began to conduct visual experiments like psychologists so that there became a field of research where the psychologists also refer to the artists. For example, Edgar Rubin, an experimental psychologist, refers in his work to the publications of Alois Riegl, an art historian, and the works of Kandinsky, an abstractionist artist. The perception of the figure-ground phenomenon that Rubin studied would later influence Theo van Doesburg and Piet Mondrian, members of the De Stijl art group. Van Doesburg praised the potential of the figureground phenomenon to bring different color grounds to the foreground by eliminating the background. Indeed, in the context of Modern Art, the De Stijl artists sought to create paintings without depth. However, for Mondrian, more than the overlapping planes of the figure-ground phenomenon was needed to get away from the perception of depth. For this reason, together with Vilmos Huszar, he developed the "raster." In this way, each rectangle is painted in one color to prevent the overlapping effect and eliminate the danger of depth (Van Campen, 1997).

Another essential aspect that the Bauhaus school adopted in its pursuit of establishing the integration of art, psychology, and architecture is the educational approach that focuses on object design. According to Allen (2018), the Bauhaus educational method is based on students designing objects. It is known that Walter Gropius, the first director of Bauhaus, created an educational vision that combines architecture, sculpture, and painting in the opening speech of the school. Gropius' successor, Hannes Meyer stated that objects began to replace architecture through white walls that function as a background for objects, making the architects merely "producers and curators" of objects (Allen, 2018).

In the turbulent atmosphere that Simmel investigated in the growth of cities, the disappearance of culture, and the emergence of the bored individual, architects and artists offer solutions for reconstructing society. For instance, expressionists like Kandinsky seek to reconstruct a "lost sense of community" through "artistic labor." Most artists in this period, like architects, support the destruction of the object. However, Kandinsky and Klee differ from other artists at this point. Although Klee accepts that the object is dead, the sensation of the object stands in an essential place for him. For Klee, the object has a "mysterious inner life" and "life force" (Allen, 2018).

It can be said that Klee's ideas about the object oppose the Kantian idea that objects can only be perceived by a "subjective viewpoint." The basis of this understanding, which Kandinsky also adopted, lies in the empathy theory in the sense of "objectified self-enjoyment." Like Klee, in his Bauhaus classes, Kandinsky "focused on analytical drawing and the elements of abstract form, from which he built up a universally valid grammar of form and color" (Allen, 2018).

With the links he established between "colors and spirit, line and life force," Kandinsky aimed to reach beyond the boundaries of art and to achieve the unity of the human and the divine. According to Allen (2018), this system, which eliminates the artist and other concrete factors (technique) belonging to the object, constitutes the importance of the point where the Bauhaus school stands (Allen, 2018).

As can be seen, the developments that began under the influence of empathy theories resulted in design education by the artists of the Bauhaus school, which in turn enabled the interaction between Gestalt Theory, abstraction, and object design. While Lipps associated aesthetics with the empathic process in the mind, Kandinsky defined "aesthetic phenomena to be organizations that are perceived directly" (Van Campen, 1997).

It is seen that the deep and psychic relationship that exists in the empathy theory with the outside world is replaced by a more superficial and mechanical relationship through Gestalt. Worringerian abstraction or Worringerian empathy theory, which is the basis of Gestalt Theory, offers, in Helg's words, a space of "narcissistic mirroring" for the modern self-image. The empathic attitude here as "objectified self-enjoyment" is achieved through the abstract object with the "exclusion of life." Therefore, this process, which started with empathy theory and continued with Worringerian abstraction, emerged as Gestalt theory within the Bauhaus school. As stated earlier, this new form of empathy theory involves a more mechanical and superficial relationship that the individual establishes with the object in a narcissistic manner. What is meant by the object here is abstract painting in art, while in architecture, it is the product of Modern Architecture purified of its figurative (e.g., historical) layers (Helg, 2015).

Abstraction as a New Version of Empathy Theory in Architecture

Cubism is the first connection between Modern Art and Modern Architecture, reflecting the empathy theory-based changes. As it is known, Cubism searched for a new understanding of reality in art by the representation of objects in space simultaneously from all directions instead of in perspectival depth. Representing a "deeper" reality by eliminating the three-dimensionality started with Cezanne. However, it quickly became a characteristic of the Modern Art after Cubism, which, for Rowe and Slutzky, creates an effect of "transparency" in the sense of "the simultaneous perception of different spatial positions" (Rowe & Slutzky, 1963). Rowe and Slutzky claim that transparency as an effect of Modern Art becomes visible through the examples of Modern Architecture.

Giedion explains the concept of transparency through the relationship between Picasso's L'Arlésienne and Gropius' Bauhaus design (Figure 4). According to him, the Cubismbased transparency and simultaneity that allows both the profile view and the entire face of an object to be seen at the same time in L'Arlésienne is similar to the simultaneity of space-time that occurs in the Bauhaus building with the diversity of points of reference (Giedion, 1959). Soon after Giedion, Rowe & Slutzky (1963) classify transparency under literal and phenomenal concepts. While literal transparency is a condition arising from the transparent nature of matter, phenomenal transparency is related to space organization. For them, the phenomenal transparency in architecture stems from the effect of two-dimensionality, like in Cubist painting, where the matter is the "articulated presentation of frontally displayed objects in a shallow, abstracted space" (Rowe & Slutzky, 1963).

Rowe and Slutzky argue that transparency in architecture can only become a reality when it is freed from the falsity of three dimensions. Therefore, the phenomenal transparency inherent in the cubist attitude in architecture is related to the organization of planes rather than the transparent structure of the material. While in the Bauhaus building designed by Gropius, transparency literally arises from extensive surfaces of glass and therefore has material character, in the Villa Stein designed by Corbusier in Garches (Figure 5), it is but a phenomenal transparency where two-dimensional planes create a sense of depth (seeing through) which is not perspectival (that is, not temporal). According to Rowe & Slutzky (1963) interprets the complementary composition of incomplete and fragmented surfaces as the removal of the three-dimensionality of the object, just like in a cubist painting (Rowe & Slutzky, 1963).



Figure 4. Bauhaus, Dessau, 1926 (Giedion, 1959).



Figure 5. Villa Stein, Garches, 1926 (Fondation Le Corbusier, n.d.).

The idea established by Klee and Kandinsky on transcending the object through abstraction on the artistic plane finds its counterpart in Le Corbusier's architecture under the influence of Purism - a version of Cubism devised by Le Corbusier and Ozenfant. Like in his buildings, he brings together elements in space with a marriage of contours and establishes the objects of modern culture (Allen, 2018).

As mentioned, this is not only about the abstract design of surfaces. Le Corbusier rejects the mono-focal perspective of classical architecture. In Corbusier's architecture, this rejection appears in the architectural promenade (Figure 6) (Charitonidou, 2022a). Architectural promenade

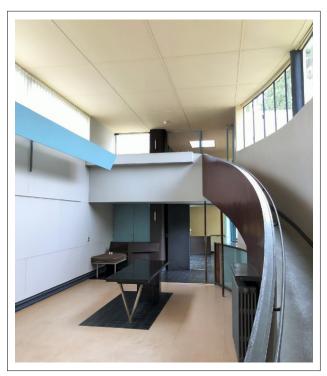


Figure 6. Architectural Promenade, the Maison La Roche, Paris, 1925 (The London List, n.d.).

is the architectural version of the cubist idea of seeing different aspects of an object simultaneously. Accordingly, architectural promenade allows the body to perceive a building by walking in, on, and around it (Lee, 2014).

In contrast to the perspective of classical architecture, which was based on a vantage point, in the architectural promenade, which reflects the empathy theories and especially Schmarsow's concept of "sense of space," space begins to be perceived as a "three-dimensional" volume defined by two-dimensional abstract surfaces. In short, Architectural Promenade offers different viewpoints and perspectives to the body moving inside the house and the city (Charitonidou, 2022a). Moreover, space becomes designed by experience (Charitonidou, 2022b).

Le Corbusier's idea of the "architectural promenade" connects Schmarsow's projection of the empathy theory into architectural space and Rowe and Slutzky's transparency theory in a peculiar way. While the promenade concerns a movement in space with consequent emphatic impressions, the spaces of the promenade receive their definition from a phenomenal expansion of abstract forms out of planar surfaces. Villa Savoye is a prime example of this situation (Figure 7), which, according to Le Corbusier, offers aspects

constantly varied, unexpected and sometimes astonishing" (Louw, 2016).

Villa Savoye is not experienced from a single point because the body is in a state of movement on the horizontal and vertical axis, moving, orienting forward, and thus establishing a three-dimensional space. In addition to that, Le Corbusier adds the fourth dimension to the layers of space, which is "time." Although the layer of "time" used by Le Corbusier contains different implications of time in different buildings, it has a meaning based on the experience of "now" in the Villa Savoye. In this context, Le Corbusier connects the strollers walking on the ramp - a tool to facilitate the architectural promenade - to the present moment by making them observe the outdoor space and, thus, the movements in nature. Louw describes the experience here as a cinematographic experience. As in cinema, time is reconstructed in this stroll through slowdowns, accelerations, and different vistas observed during the experience. According to Louw (2016), during this wandering, the subject experiences different seasons, changing angles of light (sun), and different emotional states of his/her own, thus distancing himself/herself from situations that would detach him/her from the present moment.

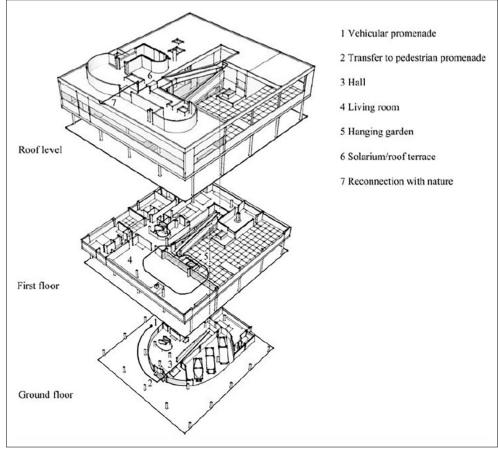


Figure 7. Architectural Promenade, Villa Savoye, Poissy, 1931 (Louw, 2016).

Lee claims that Le Corbusier's architecture reflects both the perspectival tradition of modernity and the phenomenology of bodily experience at the same time. As a matter of fact, contrary to the Cartesian thought that sees the mind as absolute, phenomenology includes the body in consciousness. Consciousness turns towards the object through the body in phenomenological philosophy. Against the perspectival tradition of modernity, in phenomenology, the object is not fixed; the body re-experiences and grasps it every moment. Therefore, although Corbusier's architecture is based on Cartesian thought and the geometric architecture of the societe machineste, it is a sign of the partial emergence of the phenomenological attitude in architecture in terms of designing the body's movement within the structure. This experience approaches nature with a focus on sight, and all senses are not included in the experience (Lee, 2014). Therefore, the architectural promenade continues empathy theory-based approaches in architecture and exhibits some of the first traces of phenomenological approaches.

CONCLUSION

This research assumes that the notion of experience appears in architecture through "Einfühlung theory /empathy theory." By revealing the early conceptual links between empathy, abstraction, and spatial experience, this study reframes empathy theory as a foundational influence in the evolution of architectural experience.

This assumption is supported by tracing the historical development of aesthetic theories—from early philosophical inquiries into beauty and emotion to the emergence of empathy theory in psychological aesthetics. The analysis suggests that empathy theory laid the conceptual groundwork for understanding architecture as a space to be perceived and experienced by an embodied subject, ultimately shaping modern architectural paradigms such as *Raumplan* and the *architectural promenade*.

Also, the research reveals the connections of how empathy theory passes from art to architecture. It can be said that the connection of empathy theory with architecture occurs in two ways. The first is that the idea of space, which came to the fore with empathy theory, became directly visible in the early periods of modern architecture through expressions such as "architectural wandering, volume, raumplan" which include the "circulation of the body in space"; another effect is that empathy theory triggered the formation of the idea of abstraction in modern art and then this effect shaped modern architecture.

Le Corbusier's concept of *architectural promenade* is the result of the ideas that started with the empathy theory in art, which merged with its opposite, the abstraction through movements such as Cubism, suprematism, and Purism. In Le Corbusier's architecture, space is organized as

a sequence of different moments, allowing the body to move and see different perspectives and images simultaneously. Consequently, an architectural design idea based on "experience" has been created, where the body perceives the space through "simultaneously ordered" abstract surfaces that emphasize space.

As a continuation of Hildebrand's emphasis on empathy theory-based depth, the z-coordinate is felt in the space in addition to the x and y coordinates. Therefore, in modern architecture, the body is not stuck on surfaces. Surfaces are not figurative in space and are constructed to create a sense of volume. Accordingly, architectural structures are designed like two-dimensional paintings, which implies three-dimensionality. The subject in all this new fiction is the body that experiences space mechanically and narcissistically. Since the new space design is less figurative, it is explained by the psychology of space perception rather than the empathy theory as formulated in the late 19th century. Here, the body does not identify with the figurative elements in the space as in the empathic experience. Instead, the space affects the body, which is treated like a perception machine.

According to Pallasmaa (2018), the unique power of architecture lies in its ability to let us momentarily inhabit the world and ourselves through the embodied sensitivity of the creator. This perspective resonates with the empathy-based spatial paradigms discussed throughout this study and reaffirms the enduring relevance of bodily experience in architectural thinking. The empathy-based approach that becomes evident in the architectural promenade continues to inform contemporary architectural thought, particularly in discussions that emphasize embodied spatial perception.

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