



Rethinking the Relationship Between Architectural Representation and Spatial Experience Through the 12th International Architecture Exhibition

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Abstract

The experience of space has a multi-sensory structure realized through the movement of the body. This situation effectively discusses the architectural representations used both in the design process of the space and after it is built, through the concept of experience. Architectural representations are conventionally evaluated for their capacity to communicate formal and technical knowledge of space; their ability to convey the experiential qualities of space — what it feels like to move through, inhabit, and perceive a building — remains theoretically underdeveloped. This study investigates the relationship between architectural representation and spatial experience. Drawing on a cross-reading of phenomenological architectural theory, seven experiential qualities that structure spatial perception are identified: light-shadow, acoustics-sound, proportion-scale, color-texture, movement, temporality, and relationship with landscape. These categories form an analytical framework applied to the 12th International Architecture Exhibition of the Venice Biennale (2010), curated by Kazuyo Sejima under the theme "People Meet in Architecture." Using Luis Alfonso's "components of experiential representation" as the analytical instrument, each installation is examined by asking what experiential quality it represents and how that quality is communicated through the medium. The analysis demonstrates how all seven qualities are represented through the exhibition medium. This study contributes to the field by transforming phenomenological spatial theory into a structured analytical framework, empirically applying it to an architectural exhibition as a representational medium, and expanding the concept of experiential representation by situating it within concrete analytical categories.

Keywords: *Architecture exhibition, Architectural representation, Experiential qualities of space, Experiential representation, Perceptual experience*

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INTRODUCTION

According to Dewey (1980), art begins with what is understood and ends in astonishment. However, in architecture, reshaping an experience is more direct and comprehensive than in other art forms. When this act of reshaping is taken as a reproduction of the experience of nature or life, Dewey argues that architecture itself is not representation. Architecture is more than the use of natural forms. They express the values of collective human life and their characteristic effects on the observer. That is, space itself is not a representational art like painting or sculpture, and therefore not something that is understood. One gradually grasps the space by moving in and out of it and through repeated visits, in different light levels of the building and in relation to changing moods (Dewey, 1980).

This spatial quality is effective in discussing architectural representations through the concept of experience. Architecture uses representations both during the design process of the space and after the space is physically present in the world. During the design process, representations are used to express ideas about the design, while afterward they serve many purposes, such as knowledge, criticism, and documenting the building. However, the adequacy of representational tools in conveying the experience of space has been debated. According to the existing literature, representational tools are selective, and qualities of space are subjected to a reduction process determined by the limits of the tool used to represent them (Perez-Gomez, 2006; Böhme, 2017; Croset, 1988; Loos, 2021; Frascari, 2007). Therefore, representations can only be considered reflections of the spatial object or of the technical knowledge of the space. However, in architectural representations, the key is to convey the qualities of the space and how we experience it. Although there is an opposing view in the literature (Nigianni, 2007; El-Bizri, 2007; de la Fuente, 2016) arguing that representational tools reflect the spatial experience, what this experience is and how it is communicated through representational tools has not been clarified, as all these discourses are discussed through the same representational tools (drawing, model, perspective, photograph, text, diagram, etc.).

In his article "Towards experiential representation in architecture", Luis Alfonso (2016) uses the term "experiential representation". This term arises from the intention to encompass the representation of architectural phenomena in general, rather than limiting it to the visual experiences that iconic representation focuses on. When representing an architectural object or idea, the designer must consider the experience the representation will create for the final audience (de la Fuente, 2016, p. 47).

Mallgrave argues that architectural theory, as it has been taught and disseminated in recent decades, has failed in contemporary practice. This failure in practice has been compounded in recent years by the profession's forced shift to digital design and the teaching of design

education to students to think about architecture on the computer, ignoring the experiential dimension of architecture. For this, instead of focusing on the formal properties of design at the level of architectural practice, we need to ask how to make the transition to how a person experiences it (Mallgrave, 2018, p.174). Considering that we rarely encounter high-quality buildings in our daily lives and communicate with architecture mostly through its representations, re-establishing or strengthening the relationship between architectural representation and spatial experience may constitute a starting point for seeking an answer to Mallgrave's question.

The study aims to expand the concept of experiential representation by explicitly relating it to phenomenological theories of spatial experience. Despite a growing body of literature on phenomenological approaches to space and on the representational limits of conventional architectural media, no prior study has systematically operationalized phenomenological spatial qualities into a structured analytical framework and applied it empirically to an architectural exhibition as a representational medium. The discourse on experiential representation (de la Fuente, 2016) remains largely normative and design-oriented; it establishes the desirability of communicating spatial experience through representation but does not specify the constituent qualities of that experience, nor does it test whether any given representational environment successfully conveys them. Furthermore, while architectural exhibitions have received sustained attention as curatorial and historiographical objects (Lopez Serfozo, 2018; Levy & Menking, 2010), they have not been examined as sites of representational inquiry in which specific phenomenological qualities can be identified, traced, and evaluated. Based on this, the analysis conducted through the architecture exhibition can establish a framework that includes experiential spatial qualities as analytical categories for architectural representation.

The central research question guiding this study is: Can an architectural exhibition, regarded as a representational medium, convey the experiential qualities of a space, and, if so, which qualities can be represented and how? Therefore, the study's original contribution is threefold: it translates phenomenological spatial theory into seven distinct analytical categories—light-shadow, acoustics-sound, proportion-scale, color-texture, movement, temporality, and relationship with landscape—derived from a cross-reading of foundational theoretical sources; it empirically examines these categories through the interpretive analysis of a single, theoretically grounded case study; and by expanding Alfonso's concept of experiential representation, it provides this concept with a concrete analytical foundation it has lacked until now.

EXPERIENTIAL QUALITIES OF SPACE

Fred Dretske (2003, p. 67) argues that the phenomenal character of perceptual experience—what it is like to have an experience—is determined by the properties of the object represented rather than by the object itself. He calls these the “experiential qualities” of the thing perceived. This claim has a direct architectural implication: if what we experience when encountering a space is constituted by the properties that space makes perceptible, then an architectural representation can convey spatial experience only to the extent that it makes those properties—those experiential qualities—available to the perceiver. Merleau-Ponty (2020, p. 31) arrives at a compatible position from the side of embodied perception, noting that what is heard or seen are the properties of the object; Norberg-Schulz (1966, p. 28) frames the same relationship architecturally, writing that we perceive objects through their “manifestations or mediating phenomena,” which he calls properties.

Dretske (2003, p. 68) further distinguishes between the medium and the content of representation. This distinction matters here because it clarifies the evaluative criterion for architectural representation: the question is not whether a representational tool accurately reproduces the physical form of a space, but whether it makes available the experiential qualities that constitute the content of spatial experience. If those qualities are absent from the representation, the phenomenal character of the experience it produces will differ fundamentally from the experience of the space itself. The question that follows—what are those qualities?—organizes the remainder of this section.

Moholy-Nagy defines architecture as experienceable spatial relations. Although most people today judge space by its formal character, these qualities do not speak to the qualities of space. The true spatial experience lies in the simultaneous penetration of inside, outside, above, and below, that is, in the flow of volumetric relations and the invisible play of material forces. One's movement in space is necessary for the comprehension of space, which is essentially a set of positional relations between objects (Moholy-Nagy, 2005, p. 163). Only when we experience space does architecture mean something to us; it becomes meaningful. Space only means something to people when it is experienced, when all the senses are engaged with it simultaneously. Space involves an embodied experience determined by the reach and grasp of our hand, the touch of our fingers, the warmth and coldness we feel on our skin, the sound of our footsteps, the posture we take, and the position of our eyes (McCarter & Pallasmaa, 2012, p. 5). In Bachelard's words, “Inhabited space transcends geometrical space” (Bachelard, 1994, p. 47).

Wölfflin is another name who draws attention to the relationship between space and experience, stating that architectonic formations do not act as simple geometry but as mass forms (Wölfflin, 2015, p. 13). According to Wölfflin, spatial form makes sense in the context of the

movements and forces that bring it into existence. For this, the movement in question must also be experienced by the subject, and the subject must accompany this movement (Wölfflin, 2015, p. 17).

An architectural structure demands certain perspectives to be understood, and to perceive these perspectives, one must interact with the structure at a sufficient depth. Movement is key in this interaction, since a complex architectural organism can only be experienced through movement, where successive perceptions are organized into a total experience. The experience of space is then more than just a visual impression at any given moment (Norberg-Schulz, 1966, p. 198). Expressing a similar statement, Croset states that the complex reality of a building can only be understood through an in-depth visit, and that the temporal experience, which is the fundamental dimension of architecture, only emerges when the building is encountered (Croset, 1988, p. 201).

The visible signs and perceptible aspects of architectural structures are revealed in an experiential continuum of diverse appearances in space-time. It is through the spatio-temporal displacement of the body that the formal totality of what is seen can be clearly perceived. Architectural space is invisible in perceptual reality but reveals itself through the emergence of its various visible aspects in a sequential continuum. While the space is seen from multiple perspectives in spatio-temporal space, its geometric structure brings the visible parts together into a structural totality that is invisible in the whole. The perceptual field is revealed in the flow of various appearances through bodily movement. And the image is woven under the guidance of spatio-temporal experience. The experiential visibility of architecture is directly related to spatial depth, as the open and perceptible space that makes bodily movement possible (El-Bizri, 2007, p. 37-38).

According to Rasmussen, the spatial forms that architecture creates for people are not only to be viewed from the outside or to determine a building's style from its external appearance, but also to be lived in. By walking through the space, one should feel its emptiness, how it is surrounded by walls, its acoustics, and become aware of its textural effects (Rasmussen, 2010, p. 35). Space cannot be grasped by looking at it from a certain distance, like a painting; one must walk around in it. A space is more than the sum of its length, width, and height. This excess, which Zevi calls the fourth dimension, is time, and to comprehend it, one needs to move through the space one after another. One must experience the space, step into the "architectural organism," and feel that we are part of this structure; this is how it is possible to grasp the space (Zevi, 2015, p. 43).

According to Scott, the value of architecture is first and foremost affected by dimensions. It is also affected by the position of light and shadows, colors, and the character of the lines that dominate the space (Scott, 1914, p. 229). The change of all these qualities changes the space experienced. According to Moholy-Nagy, space is produced by stable

spatial relationships between movement, visual effects, acoustics, light, and balance (Moholy-Nagy, 2005, p. 164). Therefore, it is difficult to give a clear answer to the question of what the experiential qualities of space are. Although it is seen that each architect or theorist produces different definitions of space by drawing attention to different qualities, their common intersection is light-shadow (McCarter & Pallasmaa, 2012; Holl, 2007; Kahn, 2017; Scott, 1914; Zumthor, 2006), acoustic-sound (Neutra, 1954; Schafer, 1994; Rasmussen, 2010; Pallasmaa, 2016; Zumthor, 2006; Holl, 2007; McCarter & Pallasmaa, 2012; Moholy-Nagy, 2005), ratio-scale (Scott, 1914; Rasmussen, 2010; Holl, 2007; Wölflin, 2015; Zumthor, 2006; Moholy-Nagy, 2005), color-texture (Rasmussen, 2010; Holl, 2007; Zumthor, 2006; Scott, 1914), movement (Moholy-Nagy, 2005; Scott, 1914; ; Pallasmaa, 2016; Zumthor, 2006; Holl, 2007), temporality (Lynch, 1972; Pallasmaa, 2016; McCarter & Pallasmaa, 2012; Holl, 2007), and the relationship with landscape (Siza, 2015; Holl, 2007; Zumthor, 2006; Norberg-Schulz, 1991; McCarter & Pallasmaa, 2012) stand out as qualities that structure the spatial experience.

METHOD

This study employs an interpretive qualitative approach combining conceptual analysis with a single instrumental case study design. The research proceeds in five sequential steps. Step 1 is the derivation of analytical categories. The experiential qualities of space were derived from a cross-reading of architectural theory and phenomenological literature. Sources that provide a clear explanation of how a specific quality (such as light-shadow or movement) contributes to the perception or experience of architectural space were included. A quality was retained as an analytical category when it emerged as a significant topic in at least three independent theoretical sources. This process yielded seven categories: light-shadow, acoustics-sound, proportion-scale, color-texture, movement, temporality, and relationship to landscape. These categories, along with their supporting sources, are presented in Table 1.

In Step 2, the case was selected. The 12th International Architecture Exhibition (Venice Architecture Biennale, 2010), curated by Kazuyo Sejima under the theme “People Meet in Architecture,” was selected as a case study on theoretical grounds. The exhibition was explicitly designed to foreground spatial experience and bodily perception—Sejima’s curatorial directive asked participating architects to “create atmosphere” within the exhibition space’s existing conditions rather than display representational objects. This renders the exhibition a paradigmatic and theoretically saturated instance of experiential representation (Flyvbjerg, 2006), making it appropriate for a study concerned precisely with the conditions under which representational environments can convey experiential spatial qualities.

Table 1. The experiential qualities of the space.

	Scott, 1914	Hall, 2007	Pallasmaa, 2016	Moholy-Nagy, 2005	Zumthor, 2006	Rasmussen, 2010	McCarter & Pallasmaa, 2012
Light-Shadow	light and shadow	light and shadow	shadow	light-shadow	the light on things	daylight	light
Acoustic-Sound		sound	acoustic intimacy	acoustical phenomena	the sound of a space	sound	silence
Ratio-Scale	dimension, character of the predominating lines	proportion-scale		balance	levels of intimacy	solids and cavities, scale and proportion	space
Color-Texture	color	color, haptic realm	the shape of touch	visual factors	material compatibility, surrounding objects	color, textural effects	
Movement	movement	perspectival space	the body in the centre, mimesis of the body time and solitude, images of muscle and bone	Movement, alteration of position	between composure and seduction		
Temporality		spatiality of night, time duration					time, ritual, memory
Relationship with landscape		the merging of object and field, site circumstance			tension between interior and exterior, architecture as surroundings		landscape, place
Other		water	scent		the temperature of a space, coherence		matter, gravity

Step 3 of the study involves data collection. Data was collected from three complementary source types. Primary curatorial sources include the official exhibition catalog (Sejima, 2010), which provides authoritative statements regarding the curatorial intent, and Sejima's extensive interview with Aaron Levy and William Menking (Levy & Menking, 2010). Critical evaluation sources include studies on the Venice Biennale exhibition design that document visitor and professional reactions (Lopez Serfozo, 2018) and contemporary critical texts (Stathaki et al., 2010). Visual documentation of the installations—sourced from the catalog and publications—provided the evidence base for the analytical tables.

In Step 4, spatial boundaries were defined, and the installation site was selected; the analysis is limited to the Arsenale's main exhibition space. The Giardini section was excluded because, as Sejima herself noted, it is organized in a traditional, multifaceted exhibition format lacking the spatial continuity and site-specificity that characterize the Arsenale (Levy & Menking, 2010, p. 171). Within the Arsenale, an installation was included in the analytical table for a specific quality when the curatorial logic was primarily aimed at conveying that quality—that is, when the installation's representational strategy was structured to make that quality perceptible or experiential for visitors. Installations in which a quality emerged only by chance, as a byproduct of the Arsenale's material or spatial context, were noted in the narrative analysis but excluded from the tables.

In the final step, the analytical framework was applied. Luis Alfonso's "components of experiential representation" framework (de la Fuente, 2016, p. 51) was applied by posing two structured questions to each selected installation: (a) what experiential quality is being represented—that is, which spatial quality does this installation address as the subject of the act of representation; and (b) how is this quality conveyed—that is, through which material, spatial, or curatorial means is it made perceptible. The responses were recorded in tables prepared separately for each quality in Chapter 4 and later synthesized in the results section.

PEOPLE MEET IN ARCHITECTURE: 12TH INTERNATIONAL ARCHITECTURE EXHIBITION ¹

In this study, the representation of the experiential qualities of space is examined through the 12th International Architecture Exhibition (People meet in architecture) of the Venice Architecture Biennale held in 2010. This exhibition, curated by Kazuyo Sejima, does not refer to a specific concept but focuses on the space itself and aims for people to experience architecture. At this point, it can be said that the exhibition's referent is the experience of architecture, as Louis Alfonso stated.

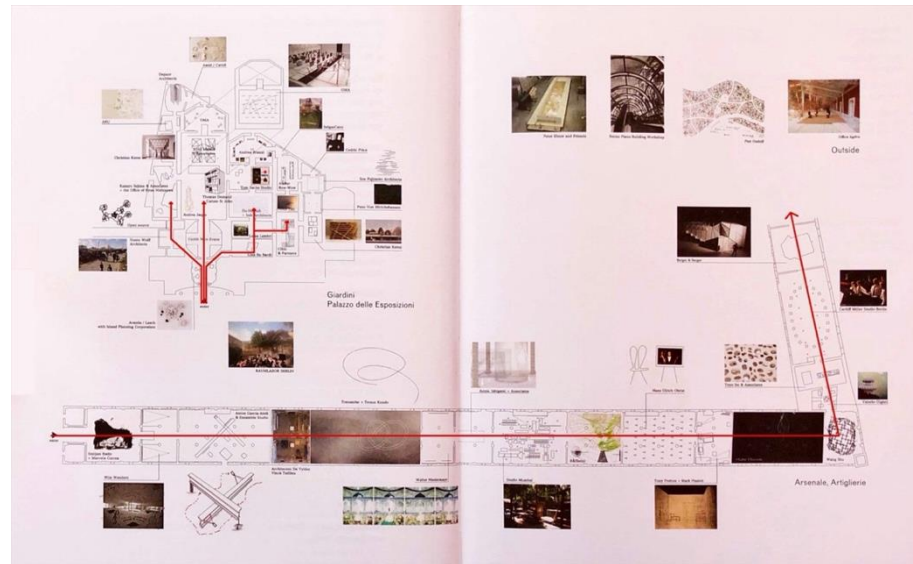
According to Sejima, in the age of the internet, people can access information instantly. It is more important to come together with people and experience the projects, to establish some kind of contact with the exhibited materials. Sejima states that he wants to use the existing exhibition space to realize this idea. For this reason, he divided the main exhibition spaces in the Arsenale and Giardini into rooms, defining a separate space for each participant and inviting them to create a distinct atmosphere with the limited materials available. Thus, visitors will be able to have diverse experiences and feel distinct atmospheres (Levy & Menking, 2010, p. 166). In this sense, Sejima characterizes the Biennale as "a chance for less information and more emotion" (Levy & Menking, 2010, p. 176). The fact that each work has its own space allows the fixed space to be taken out of context and incorporated into the exhibition's content in some parts. Considering the intensity of the projects, the representations on display are juxtaposed in a rhythmic order, so that the transitions between the rooms are, in a sense, designed (Levy & Menking, 2010, p. 167). At the core of this approach lies the problem of how to show architectural qualities since it is not possible to exhibit a real building in an architecture exhibition. Sejima, seeking an answer to how to exhibit architecture with its unique qualities, states that even when a one-to-one scale model is exhibited, the context is ignored. For this reason, the curator asked the participants to create something in the context of each room and to consider the possibilities of exhibiting a project within the existing conditions of the exhibition space (Levy & Menking, 2010, p. 173).

The exhibition is constructed to emphasize site-specificity and bodily interaction, referencing the scale of the human body moving through the

¹ The images used in this section are from the exhibition book "Sejima, K. (2010). People Meet in Architecture: 12th Venice Architecture Biennale", while the collages and tables were created by the authors.

space envisioned in the Arsenale. Sejima pursues the idea that people meeting in the Arsenale can recognize a social architectural experience because their bodies are constantly moving through the space. Each installation in the Arsenale can therefore be said to function as an interface between spatial information and visitors' bodies, abstracting different formal strategies into singular experiential situations (Lopez Serfozo, 2018, pp. 98-99). The exhibition design emphasizes key points such as the relationship between humans and architecture, creating atmosphere, showcasing architecture's qualities, and fostering spatial experience. What makes the 12th International Architecture Exhibition experiential rather than theoretical is the intuitive perception of materials, water, wood, color, sound, and light. All these elements are represented spatially, so the works in the exhibition, like those in previous biennials, do not require explanatory texts and have no commercial concerns (Stathaki et al., 2010).

Figure 1. Giardini and Arsenale exhibition plans (Sejima, 2010, pp. 16-17).



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Figure 2. Location of the Arsenale and outdoor installations (Created by the author).



When the exhibition plans are analyzed, the difference between the Giardini and Arsenale exhibition spaces is striking (Figure 1). In his interview with Aaron Levy and William Menking, curator Sejima states that Giardini is composed of fragmented volumes and its circulation is multidirectional. Small works, photographs, and solo exhibitions were

shown in this space due to the inability to create a definite route and the space's dimensions (Levy & Menking, 2010, p. 171). At this point, we can say that the Giardini section was organized in the traditional exhibition format.

Due to the fact that both the works with experiential qualities were located in the Arsenale exhibition space and the idea of the installations using the exhibition space as a context, which was mentioned in the theme of the exhibition, was embodied in this part of the exhibition, the main exhibition space of the Arsenale was focused within the scope of the study; the Giardini section of the exhibition was not included in the analysis. The Arsenale section of the exhibition includes the main exhibition space, divided into 17 rooms with one installation each, and the outdoor spaces, which host 4 installations (Figure 2). It has been revealed how experiential qualities are represented, with which tools, and how they are perceived/experienced by visitors in Arsenale.

Light-Shadow

Light and shadow are the most emphasized experiential qualities of space. This result is related to the fact that the experience of space would not be possible without light. Light and shadow give volumes, spaces, and surfaces their character and expressive power, revealing the quality of materials. The reflections of temporal changes, such as day, night, and season, in space link architectural space with the dynamics of nature; "natural light breathes life and connects the material world with cosmic dimensions" (McCarter & Pallasmaa, 2012, p. 151).

Since the sun is not a point source of light, the effect of daylight is infinitely varied. Light is vertical at the equator, horizontal at the poles, cool at the full moon, warm and colorful at sunrise and sunset, and different in character both during the day and in all geographical regions, so each different space has its own unique light. Light often directly affects our mood. Because light controls the processes of biological life, our mood, activity, and energy levels are transformed by its effects (Holl, 2007, p. 63; McCarter & Pallasmaa, 2012, p. 151).

Light and shadow divide space into parts and sub-spaces, giving it rhythm, a sense of scale, and intimacy. According to Scott, another name that emphasizes the quality of space as directly related to the position of light and shadows, the light source attracts the eye and suggests independent movement (Scott, 1914, p. 229). According to Pallasmaa, "Constant high levels of lighting, leaving no room for mental retreat or privacy, is an effective method of mental torture; even the dark interior of the self is exposed and violated" (Pallasmaa, 2016, p. 60). Dim light and shadows suppress the sharpness of vision, paving the way for clear thinking; they render depth and distance indistinct, activating unconscious peripheral vision and tactility (McCarter & Pallasmaa, 2012, p. 154).

Table 2. Representation of the quality of light and shadow at the 12th International Architecture Exhibition.

	How? (What are the tools?)	How is it represented?	How is it experienced?
Cloudscapes	An artificial cloud with different layers of air, where the air temperature increases significantly depending on the altitude, and a ramp surrounding the columns of the main space.		Through the artificial cloud created in the exhibition space, the natural light entering the building is screened, the cloud layer makes the road invisible and at some moments people can only see other people through the cloud. The atmospheres above and below the cloud have different qualities of light, temperature and humidity, separating the spaces with a light filter effect.
Your split second house	Curtains that disconnect the space from natural light, spontaneous flashing electronic flashes and the water element		In the room where the installation is located, the exhibition space is cut off from daylight and the room is darkened. Thus, the volumetric and textual details of the main exhibition space are pushed to the background, while the natural connection between the visitor and time is severed through "lack of light".
Plazzasalone	Artificial lighting of different qualities such as car headlights, table lamps, ambiguous objects to create a variety of shadows		While natural light is not interfered with, artificial lighting and the use of various objects to produce shadows create an atmosphere that moves visitors between private and urban interiors.
Work-Place	Vertical lighting elements emulating the columns of the main space, models, drawings and furnitures		Traditional forms of production and craftsmanship skills are considered as a process in which components such as local materials and real-life conditions are interpreted together, and the exhibition space is transformed into a workshop environment representing this process.

Crucially, the light-shadow effect experienced throughout the exhibition is not confined to installations where this quality is the primary representational subject. The decision to preserve the original window openings of the Arsenale's main exhibition hall—a deliberate curatorial choice rather than a practical default—means that natural light varies in quality, direction, and intensity across the full spatial sequence of the exhibition. This has a direct analytical implication: the light-shadow quality is not only represented in specific installations but is embedded in the representational medium itself. Figure 3 documents this variation across different sections of the exhibition route, demonstrating that the spatial experience of light and shadow is a continuous, pervasive condition throughout the exhibition rather than an isolated curatorial gesture.

Figure 3. Variations of light and shadow in different parts of the exhibition.

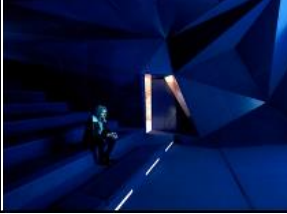


Acoustic-Sound

Space is audible; we hear the sounds it reflects. This sound gives us an idea of the space's form and material. In other words, the sense of hearing structures the experience of space. For this reason, each space should have its own acoustic effects. Thus, it becomes possible to create an auditory impression of the space and to become aware of its characteristic sound; the qualities of space, such as size and form, can be grasped through the sense of hearing (Rasmussen, 2010, pp. 227-228; Pallasmaa, 2016, p. 64). Neutra writes that, whether we are conscious of it or not, the built environment appeals to or harms us as a complex aural phenomenon and is often effective even in its smallest reverberations (Neutra, 1954, p. 142).

According to Schafer, the high reverberation levels of Gothic and Renaissance churches (6-8 seconds) slow down the modulation and weight of both music and speech, whereas in today's smaller rooms, speech happens faster (Schafer, 1994, p. 219). Interiors are like large elements that collect, amplify, and transfer sound. This quality is related to the form specific to each space and the surfaces of the materials contained, and the way these materials are applied (Zumthor, 2006, p. 29). The sounds and vivid reflections within a stone cathedral heighten our awareness of the space's width, geometry, and material. However, if the same space is designed in an acoustically softened way, it may lose its spatial and experiential dimension. It is necessary to redefine space by shifting our attention from the visual to how it is shaped by the vibrations of resonant sounds, materials, and textures (Holl, 2007, p. 87).

Table 3. Representation of the quality of acoustic/sound at the 12th International Architecture Exhibition

	How? (What are the tools?)	How is it represented?	How is it experienced?
Your split second house	Curtains that disconnect the space from natural light, spontaneous flashing electronic flashes and the water element		While moving along the axis where the installation is located, visitors hear both the sound of electronic flashes and the sound of water flowing through the hoses in a moving manner. In this way, multiple senses such as sight, hearing and touch are activated to sense the flowing seconds, structuring the subject's experience within the space.
40 part motet	40 speakers strategically placed in the space, where Tallis' Spem in Allium is individually recorded		The 40 voices on the recording penetrate the space as individual fragments or as a collective whole, transforming the performance of a choir into a performance of objects sitting in a large, empty room. The space draws its visitor into a sonar and textural environment. The wooden skeleton of the Arsenale vibrates as bodies of the visitors move through the space (Lopez Serfozo, 2018, p. 91).
Ca va, Prefabricated movie theater	Prefabricated structure based on a primitive cave depiction		The displacement between the exhibition space and the movie theater is a transition from a polyphonic space to the normal rhythm of the Arsenale and then to a new space that sets its own acoustic boundaries.

Silence is as important as acoustics in the experience of space. According to Pallasmaa, the most important auditory experience a space can create is silence. Space can create an intense experience to the point of suppressing external noise and directing our attention to our own existence (Pallasmaa, 2016, p. 64). A meaningful experience of place cannot be limited to moving through it, looking at its forms and materials, touching its surfaces; the encounter also invites us to listen to its characteristic and unique silence. It is a silence that awakens mental and sensory awareness (McCarter & Pallasmaa, 2012, p. 185).

Ratio-Scale

Intuitively, humans could perceive simple mathematical ratios in their environment (Rasmussen, 2010; Holl, 2007). Scale and proportional relationships are effective qualities in the experience of space. However, it is difficult to discuss a fixed-ratio system used in architecture. While designing Villa Foscari, Palladio used a proportion system found in music. Le Corbusier develops his own system of proportions, the moduli. In other buildings, it is seen that proportions are created based on different units, as in the example of tatami in Japanese culture. At this point, Wölfflin's inclusive approach should be mentioned. According to Wölfflin, proportion is the relationship between the parts that make up the space, and it is not correct to consider proportion as a purely formal factor. Stating that the principle of proportion should be handled through organic construction, Wölfflin illustrates this situation through the human body and emphasizes that proportion is a concept related to the basis of the structure rather than form (Wölfflin, 2015, p. 47).

Table 4. Representation of the quality of ratio-scale at the 12th International Architecture Exhibition.

	How? (What are the tools?)	How is it represented?	How is it experienced?
Balancing Act	Metal springs and structural element		The two structural elements placed longitudinally in the Arsenale act as a bracket that transforms the original space. The new elements introduced into the space play with the rhythm of the building, creating a new order and changing the scale of the space.
Decay of a dome	Bamboo and pine woods		The dome produced in the exhibition space plays with the scale of the existing volume, suggesting a new height in the interior space. Visitors following the exhibition route pass through this wooden dome. In this way, they experience two different volumes in the interior space and establish a proportional relationship between them.

To put it another way, in architectural culture, proportion is based on a natural balance, and space is scaled proportionally to human beings (Holl, 2007, p. 116). This is why Zumthor (2006) calls scale levels of intimacy. For him, scale is not a fixed mathematical fact but the distance

between the elements of space and our body. All the elements of space are spatially in a relationship of proximity and distance to our body. Zumthor explains these relations through the structure of the church. The interior of a church is quite large compared to our bodies, and our bodily smallness before it makes us feel frightened. However, as we climb the church tower, the proportional difference between our bodies and the space closes. In contrast, the interior of Villa Rotondo, another gigantic and monumental building, has a sublimating effect; one does not feel fear, but rather a sense of the body expanding. Thus, we feel that we breathe more easily (Zumthor, 2006, pp. 51-53).

Color-Texture

It can be said that color and texture are material-specific qualities. Rasmussen (2010) illustrates the spatial effects of color through the city of Venice. According to Rasmussen, the colorful buildings of Venice appear lighter than the other buildings we know. The city does not look heavy and massive, with its buildings painted in vibrant colors, but rather exudes a seductive effect through its joy and mobility (Rasmussen, 2010, p. 88).

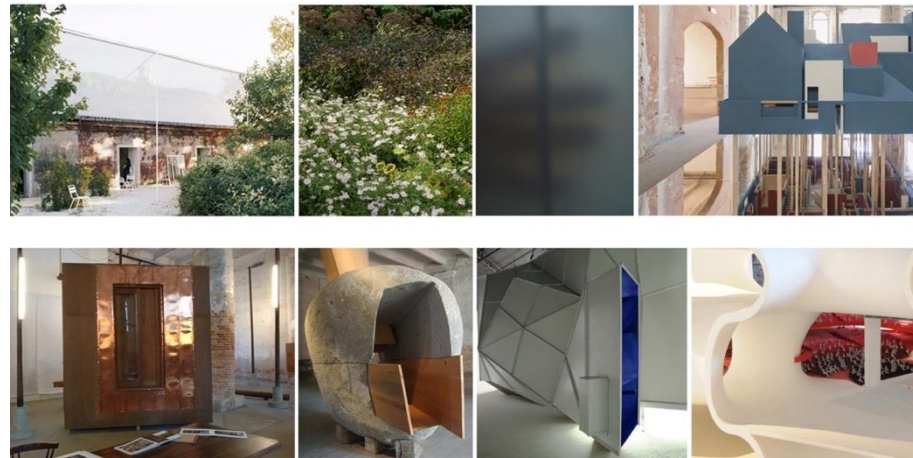
Differences in the reflectivity of glossy and matte surfaces, differences between opaque and transparent colors, and the unique properties of reflected and transmitted colors suggest an enormous range in the phenomenology of color. The impact of color on the experience of space is amplified by its variation according to available light and other variables (Holl, 2007, p. 58).

The materiality of the details that make up an architectural space is revealed, making the tactile field visible. Thus, the sensory experience intensifies. The holistic experience of space depends on the tactile reality of materials and details (Zumthor, 2006, p. 25). Today, with the use of artificial materials produced by industrial methods, the sense of touch becomes dull, and the texture and essence of the material and its details are displaced (Holl, 2007, p. 91).

Throughout the exhibition, visitors encounter a wide variety of textures and colors. In the majority of the Arsenale rooms, texture and color qualities are represented, including installations using traditional means of representation. Figure 4 presents a collage of material and chromatic conditions encountered across the exhibition route and functions here as evidence for a specific analytical claim encompassing natural materials (stone, wood, vegetation), industrial materials (transparent concrete, metal mesh, reflective surfaces), and the Arsenale's own historically patinated brick and timber. This material diversity has a phenomenological consequence that goes beyond visual variety. As Zumthor (2006, p. 25) argues, the holistic experience of space depends on the tactile reality of materials and details; the range of textures documented in Figure 4 means that the exhibition activates the haptic field—the sense of touch and its anticipation—across virtually its entire length. The historical material of the exhibition space itself,

visible in the vaulted brick ceilings and worn stone floors, adds a further layer: a texture that carries temporal information and tactile quality, linking this section of the analysis back to the quality of temporality.

Figure 4. Examples of color and texture variations from the exhibition.



Movement

The most important feature that distinguishes architecture from other arts is that it enables bodily movement. The experience of space is not limited to the gaze, where the body is kept at a certain distance. In the absence of a space in which we can move, the existence of space is doubtful. As Moholy-Nagy defines it, space is the sum of the spatial relations of bodies/volumes. In this definition, what is meant by the word 'relationship' is the relationship between boundaries, endings, and openings. This relationship between positions is controlled by movement, that is, by changing the position; it is also verified with the help of other senses. Movement is the most directly effective means of experiencing space (Moholy-Nagy, 2005, p. 163).

According to Scott, the human being, as a breathing creature, has the physical memory of movement. Space is therefore expected to respond to the need for expansion through movement, in all our bodily movements and, most importantly, in our breathing (Scott, 1914, p. 228). The image of space alludes to action, to the moment of the actional encounter, that is, space promises a function. The resulting bodily response is integral to the experience of space (Pallasmaa, 2016, p. 78).

In his book *Atmospheres*, Zumthor (Zumthor, 2006, p. 11) says: "Quality architecture to me is when a building manages to move me." It is worth emphasizing here that the relationship between space and movement is bidirectional. Beyond the effect of movement on the perception of space, space should direct us toward a certain action and encourage us to move.

Table 5. Representation of the quality of movement at the 12th international architecture exhibition.

	How? (What are the tools?)	How is it represented?	How is it experienced?
The boy hidden in a fish	Granite rock and cedar		It is difficult to grasp this space from a single point of view. Experiencing the wooden space built into the rock necessitates the movement of the body around the ass and this movement ends with the act of lying down.
Balancing Act	Metal springs and structural element		In the installation, two structural elements are placed diagonally to the existing structural layout of the space, dividing the space in two and changing the scale of the volume and the itinerary of the space. This intervention allows visitors to change direction and expands the movement in the space.
Cloudscapes	An artificial cloud with different layers of air, where the air temperature increases significantly depending on the altitude, and a ramp surrounding the columns of the main space.		In Cloudscapes, visitors are invited to walk on the ramp surrounding the columns of the Arsénale. This movement allows both an interaction with the artificial cloud, the main element of the installation, and an experience of the main exhibition space from the different perspectives. The visitor loses clarity of vision and at the same time is repositioned in the space through defined architectural conditions.
Work-Place	Vertical lighting elements emulating the columns of the main space, models, drawings and furnitures		The tools used are placed in such a way that visitors can move between objects and spend time here using the furniture that is part of the installation. The objects in space are foreign but tactile. The person entering the space can sit on a wooden chair or enter an enclosed space that seems to have been cut out of a shed. The lack of a single focus brings about continuous movement between all objects.
Piazzaalone	Artificial lighting of different qualities such as car headlights, table lamps, ambiguous objects to create a variety of shadows		In this installation, which is a representation of a square, the presence of objects of different scales gains character as they move through the space, and the viewer journeys between the urban interior and a private interior experience.
Decay of a dome	Bamboo and pine woods		The dome built in the exhibition space invites visitors to look at it from all sides. This permeable structure, which suggests a circular or repetitive movement in the room where the installation is located, allows the existing space to be re-experienced from different perspectives.
Ça va, Prefabricated movie theater	Prefabricated structure based on a primitive cave depiction		Ça va, a prefabricated movie theater, welcomes visitors through a narrow passage from the main exhibition space. And directs them to sit and watch in its own interior space.

As bodily movement is a necessity of the perception process, it also plays an important role in the experience of space. Spatial experience is the totality of displacements within the volume and actions triggered through space. The spatial nature of the exhibition necessitates the movement of the body, independent of the exhibition object. While in

traditional methods of representation, the communication between the viewer and the object is usually established through the movement of the eye, installations specific to the exhibition space can mobilize the body.

Temporality

The values attributed to temporality in the experience of space cluster around three distinct but related concerns. The first is biological rhythm: Lynch (1972, p. 117) observes that human beings are embedded in natural cycles of light, sound, and season, and that environments which disrupt these cycles damage bodily integrity. Quality architectural space should therefore reflect, rather than suppress, the temporal flow of the natural world. The second is the accumulation of memory in material: Pallasmaa (2016, p. 40–41) argues that the transformation of material over time—patina, wear, the visible inscription of age—communicates the enriching experiences of historical duration and sustains the sensory relationship between inhabitants and temporal reality. Architecture, on this account, should function as a “time museum,” making the historical flow visible and enabling an encounter with a cycle that transcends the individual lifespan (Pallasmaa, 2016, p. 65). The third concern is existential continuity: McCarter and Pallasmaa (2012, p. 51) argue that human beings are historical beings whose formation reaches into deep time, and that built environments should reflect this historicity by reconnecting inhabitants with their causal and experiential reality. If architectural space can serve as a measure of experienced time, then the convergence of material, form, and site-specific conditions can produce what Holl (2007, p. 74) calls a “combined spatial resolution” of multiple temporal registers.

In these views under the heading of temporality, temporality experienced through space is interpreted in three different ways. The first of these is to be able to read the enriching experiences of time on the structure. A space should compare the individual with the traces of infinite time that transcends its own lifespan and mediate the maintenance of collective memory. The second is to be aware of the time of day by perceiving the change in daylight in the space. The third is to travel to our existential origins through space. Space should fuse human beings with their reality by activating the mental and psychic residues that guide human behavior.

However, the experience of the quality of time in the exhibition is not limited to the installations featured in Table 6. Traces of the shipyard's historical past accompany the exhibition. During the exhibition installation, the relationship between the main exhibition space and natural light is preserved. Natural light is seen as a tool that connects the space to the times of the day. The change in light throughout the day can be felt along the entire route through the main exhibition space, allowing the temporal change to be felt.

Table 6. Representation of the quality of temporality at the 12th International Architecture Exhibition.

	How? (What are the tools?)	How is it represented?	How is it experienced?
The boy hidden in a fish	Granite rock and cedar		The shelter-space carved into the rock refers to the mother's womb, the first place of our existence in the world. The mother's womb, which is characterized as the first place and safe place of existence, evokes peaceful, calm and safe shelter. Designers create a sense of warmth by covering the space inside the rock with cedar wood.
If buildings could talk...	3D film about the Rolex Learning Center		In the film, while the building is visited by cameras, the voiceover communicates with the audience by speaking through the mouth of the building. In the image quoted from the installation, attention is drawn to the perceptibility of the transformation of day and night in the space through the opening that separates the floor and ceiling. The space connects its users to the times of the day by utilizing natural light; users move in space and time.
Your split second house	Curtains that disconnect the space from natural light, spontaneous flashing electronic flashes and the water element		"Your split second house is the space between two seconds...This space seems static, frozen in time. Nothing changes in it. What can change is the way we relate to it. The usual coordinates we normally control, such as subject and object, inside and outside, gravity and anti-gravity, are released. The sensation of reconstituting the way we experience the world can come suddenly with a jolt, as if it were not occupying a graspable period of time. We don't feel the split second, only later realizing that we have lived one (Eliasson, 2010, p. 144)."
Il giardino delle vergini	Various plants		The phototropism and photonasty movements of the plants that make up the garden in relation to light are effective in changing the plant texture and thus the experience of space depending on the time interval.

The relationship between landscape

According to Alvaro Siza, the seamlessness between interior and exterior spaces is a requirement of architecture. Architecture extends from an object to a space, and from space to the connections between spaces until it connects with nature (Siza, 2015, p. 50). The relationship of the building with the place, its surroundings, and nature constitutes an important part of the experience of space. Referring to Merleau-Ponty's term in-between reality, Holl (2007) states that architecture is a multi-layered experience beyond physicality and functionality created for a specific program. It is not only the juxtaposition of events, things, and activities that constitutes space, but something more abstract that emerges in the continuity of overlapping spaces, materials, and details. And place is part of this continuum. The moment when the other elements of the continuum begin to lose their clarity and merge with the ground is like that indicated by the term "in-between reality". The architectural synthesis of foreground, middle ground, and distant view, together with all the subjective qualities of material and light, forms the basis of the completed perception, and all these overlapping elements are critical in the creation of architectural space (Holl, 2007, p. 45). A window, the light that enters through it, and the landscape visible are

meaningful together. The way in which the place is presented to our gaze through the space, and the relationship of the space to the place, are important parts of the experience of space.

Table 7. Representation of the quality of the relationship with landscape at the 12th International Architecture Exhibition.

	How? (What are the tools?)	How is it represented?	How is it experienced?
Il giardino delle vergini	Various plants		A wide path invites people to wander through this garden, inviting visitors to stop, sit or linger for a while in this space. The choice of plants, colors and textures here reproduces the place by creating scenes for a particular sensory quality, shaping the perspectives of the distant image perceived by the subject.
Enjoy the view	Steel structure and transparent concrete block		The front end of the eight-meter-long piece is positioned on the stone shore, without support or railings, inviting the visitor to look out to sea, at passing ferries, motorboats plying the waters of the lagoon, or a cruise ship being dangerously pulled towards.

Another name that draws attention to the concept of place in the experience of space is Peter Zumthor. With the existence of space, place is divided into inside and outside. The tension or transition between inside and outside strengthens the spatial experience. As we move inwards, we become aware of what surrounds us, we feel surrounded, and vice versa as we move outwards. We experience the moment of encounter with the landscape consciously constructed by the space (Zumthor, 2006, pp. 47-49). According to Norberg-Schulz, place is an integral part of existence, and it is meaningless to imagine any phenomenon without reference to the qualities of place. With the word place, Norberg-Schulz refers to a totality of concrete things with material substance, shape, texture, and color. All these properties together determine an “environmental character” that is the essence of place, and place is given as such a character or “atmosphere” (Norberg-Schulz, 1991, p. 6).

The effects of landscape on human character, behavior, and thought are underestimated, yet landscape is a key component of our experience. Landscape is not only the context of place. It is internalized as a mental landscape and structures our experiences, thought processes, and emotions. Place-specific qualities also provide the context for architectural spaces, including space, form, rhythm, material, and color. Spaces are in dialogue with both natural places and man-made arrangements (McCarter & Pallasmaa, 2012, p. 365). A space with depth always enhances, clarifies, and strengthens the legibility of the surrounding landscape, endowing it with special meaning. Landscape and architecture intertwine; landscape frames architecture, and architecture frames or emphasizes landscape (McCarter & Pallasmaa, 2012, p. 366).

CONCLUSION

The idea of “experiencing architecture” that forms the starting point of the 12th International Architecture Exhibition, the participants being asked to create atmospheres, and the aim of creating a multi-sensory environment with rich materiality are related to this fiction. As mentioned in the previous sections of the study, it is the qualities of the represented object or idea that structure the representational experience. Based on this, within the scope of the study, the qualities possessed by the space, in other words, the qualities that give character to the spatial experience, were defined as “experiential qualities of the space,” and the exhibition as a whole, accepted as the medium of representation, was examined through its ability to represent these qualities.

The main exhibition space is divided into rooms, with each participant curating the space assigned to them; the spaces are left open, without being detached from their context. The exhibition's structure, which leaves the space open, ensures both the continuity of the experience between the installation and the visitors by connecting the rooms, which have no direct relationship with each other, and by integrating the sensory environment into the representational experience. For example, preserving the window openings in the exhibition setup allows the context of the main exhibition space and the effect of daylight in the interior spaces to be felt. Thus, both the effects of light and shadow on the spatial experience and the relationship with the times of day are represented throughout the exhibition, regardless of the installations.

In the rooms where traditional media of representation (photographs, drawings, models) are used, representation is limited to proportions and color-texture qualities (Figure 4). However, the exhibition is spatial, with bodily movement throughout. The Arsenale's unique textural and material qualities and its temporality, which is sensed through the historical traces these qualities carry, are part of the exhibition. Another point that stands out in the rooms where traditional representational media are used is the intervention of bodily movement in the presentation of the representation. The medium of representation is not presented in the traditional way, that is, on a pedestal or on a wall surface. In the 12th International Architecture Exhibition, traditional means of representation are constructed alongside various equipment elements, such as tables and chairs, and visitors are directed to experience the qualities specific to these elements through bodily movement (Figure 5). In this way, other experiential qualities, such as movement, light and shadow, and temporality, become part of the representational experience. These parts of the exhibition are differentiated by developing alternative methods for experiencing traditional representational environments. The interaction between the viewer and the object of representation is transformed in favor of bodily

Figure 5. Examples of how traditional mediums of representation are exhibited (Sejima, 2010).



The study utilizes the concept of experiential representation to clarify the relationship between architectural representation and spatial experience and argues that experiential representations should include the experiential qualities of space. The architectural exhibition, which is accepted as an alternative representation medium that can convey the experience of space in the face of criticisms against architectural representation environments, is examined within the scope of the study through the set of qualities that we can list as light-shadow, acoustics-sound, ratio-scale, color-texture, movement, temporality, and the relationship with landscape, which are proposed as a tool that we can use to understand representation environments. In this context, the 12th International Architecture Exhibition serves as a model, revealing the exhibition's conveyance of the experiential qualities of space. The study expands representation theory beyond traditional modes by demonstrating that the exhibition, as a form of representation, can convey the experiential qualities of the space. In addition, the study analyzes the concept of experiential representation within the framework of its ability to represent the experiential qualities of representational space, explicitly relating it to phenomenological theories of spatial experience. This method could create a framework that includes experiential spatial qualities as analytical categories for architectural representation.

Considering the exhibition as an experiential representation environment that can embody spatial ideas is also an answer to the problem of how architecture will be exhibited. The exhibition experience, built around the concept of atmosphere, reveals the relationships among perception, time, and the body, which are the basic modes of existence. In other words, this experience encourages conscious perception. Due to its potential to represent spatial experience, the architectural exhibition can serve as an intermediary to achieve aims such as communicating spatial knowledge, understanding space, and understanding our own spatiality. At this point, the exhibition, as an experiential medium of representation, can support the production of experience-oriented environments by mediating understanding of space. The findings on how the experiential qualities of space are represented in the installations, and on the different approaches to the exhibition of traditional representational environments, can guide studies to strengthen the relationship between representational tools and spatial experience.

Therefore, the study's contribution to the literature can be summarized as expanding the concept of experiential representation by explicitly relating it to phenomenological theories of spatial experience, creating a framework that includes the experiential qualities of space as analytical categories for architectural representation, and extending representation theory beyond traditional visual media by treating architectural exhibitions as representational environments capable of offering embodied spatial experiences.

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REFERENCES

- Bachelard, G. (1994). *The Poetics of Space*. Boston: Beacon Press.
- Böhme, G. (2017). *Atmospheric Architectures: The Aesthetics of Felt Spaces*. (T. Engels-Schwarzpaul, Çev.) London: Bloomsbury.
- Croset, P. A. (1988). The Narration of Architecture. In B. Colomina, *Architectureproduction* (s. 200-211). New York: Princeton Architectural Press.
- de la Fuente, L. A. (2016). Towards Experiential Representation In Architecture. *Journal of Architecture and Urbanism*, 40(1), 47-58.
- Dewey, J. (1980). *Art as Experience*. New York: Perigee Books.
- Dretske, F. (2003). Experience as Representation. *Philosophical Issues* (13), 67-82.
- El-Bizri, N. (2007). Imagination and Architectural Representation. In M. Frascari, J. Hale, & B. Starkey, *From Models to Drawings: Imagination and Representation in Architecture* (s. 1-7). New York: Routledge.
- Eliasson, O. (2010). Your split second house. In K. Sejima, *12th International Architecture Exhibition* (s. 144-149). Venice: Marsilio.
- Frascari, M. (2007). Introduction: Models and drawings - the invisible nature of architecture. In M. Frascari, J. Hale, & B. Starkey, *From Models to Drawings: Imagination and Representation in Architecture* (s. 1-7). New York: Routledge.
- Holl, S. (2007). Questions of Perception: Phenomenology of Architecture. In S. Holl, J. Pallasmaa, & A. Perez-Gomez, *Questions of Perception: Phenomenology of Architecture* (s. 39-120). San Francisco: William Stout Publishers.
- Kahn, L. (2017). Sessizlik ve Işık. In M. Cengizkan, *Louis Kahn'a Yeniden Bakış* (s. 33-52). İstanbul: Pera Müzesi Yayını.
- Levy, A., & Menking, W. (2010). *Architecture on Display: On The History of The Venice Biennale of Architecture*. London: Architectural Association London.
- Loos, A. (2021). *Mimarlık Üzerine* (9. b.). (A. Tümertekin, & N. Ülner, Çev.) İstanbul: Janus Yayıncılık.
- Lopez Serfozo, A. (2018). *Architecture as Building, Object and Curatorial Project: Retracing the History of Architecture Exhibitions at the Venice Biennale*. Princeton: Princeton University.
- Lynch, K. (1972). *What Time Is This Place?* Cambridge: The MIT Press
- Mallgrave, H. F. (2018). *From Object to Experience: The New Culture of Architectural Design*. London: Bloomsbury Visual Arts.
- McCarter, R., & Pallasmaa, J. (2012). *Understanding Architecture*. New York: Phaidon Press.
- Merleau-Ponty, M. (2020). *Algının Fenomenolojisi* (2. b.). İstanbul: İthaki Yayınları.

- Moholy-Nagy, L. (2005). *The new vision : fundamentals of Bauhaus design, painting, sculpture, and architecture*. New York: Dover Publications.
- Neutra, R. (1954). *Survival Through Design*. London: Oxford University Press.
- Nigianni, B. (2007). Architecture as image-space-text. In M. Frascari, J. Hale, & B. Starkey, *From Models to Drawings: Imagination and Representation in Architecture* (s. 253-260). New York: Routledge.
- Norberg-Schulz, C. (1966). *Intentions in Architecture*. Cambridge: The MIT Press.
- Norberg-Schulz, C. (1991). *Genius Loci: Towards a Phenomenology of Architecture*. New York: Rizzoli.
- Perez-Gomez, A. (2006). Questions of representation: the poetic origin of architecture. *Architectural Research Quarterly*, 9(3-4), 217-225.
- Pallasmaa, J. (2016). *Tenin Gözleri: Mimarlık ve Duyular* (3 b.). (A. U. Kılıç, Çev.) İstanbul: YEM Yayın.
- Rasmussen, S. E. (2010). *Yaşanan Mimari* (3. b.). (Ö. Erduran, Çev.) İstanbul: Remzi Kitabevi.
- Schafer, R. M. (1994). *Our Sonic Environment and The Soundscape: The Tuning of the World*. Rochester: Destiny Books.
- Scott, G. (1914). *The Architecture of Humanism*. New York: Houghton Mifflin Company.
- Sejima, K. (2010). People Meet in Architecture: 12th Venice Architecture Biennale. Venice, Italy: Marsilio.
- Siza, A. (2015). *Apaçıklığı İmgelemek*. (A. Tümertekin, Çev.) İstanbul: Janus Yayıncılık.
- Stathaki, E., Bell, J., & O'Kelly, E. (2010). *Venice Architecture Biennale 2010*. <https://www.wallpaper.com/architecture/venice-architecture-biennale-2010>
- Wölfflin, H. (2015). *Mimarlık Psikolojisine Öndeyişler*. (N. Ülner, & A. Tümertekin, Çev.) İstanbul: Janus Yayıncılık.
- Zevi, B. (2015). *Mimarlığı Görebilmek* (1. b.). (A. Tümertekin, Çev.) İstanbul: Daimon Yayınları.
- Zumthor, P. (2006). *Atmospheres: Architectural Environments, Surrounding Objects*. Basel: Birkhauser.

Resume

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