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Professional paper

IS IT A HOUSE OR A SCHOOL? INTERDISCIPLINARY REFLECTIONS ON THE IMPORTANCE OF MEANING IN ARCHITECTURE

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Abstract

A young girl feels uncertainty upon encountering a newly erected building in her neighborhood. Although the structure is, in fact, a private residence, she is not inclined to recognize it as such, as its architectural form evokes the appearance of a school for her. Many passersby exhibit a comparable response, reinforcing the collective belief that the building deviates from the conventional image of a house. This instance of perceptual ambiguity exposes a wider, frequently neglected phenomenon in architectural practice: the divergence between a building's intended purpose and its perceived identity.
Many authors assert that the capacity to read and interpret the built environment profoundly influences individual interactions and the experiences it generates. Architectural experiences are most positively evaluated when situated near the midpoint of the continuum between the unfamiliar and the familiar. Encounters that are excessively foreign to interpret or overly familiar to engage can reduce the richness and depth of spatial experience. Accordingly, this article draws on theoretical perspectives from neuroscience, psychology, sociology, philosophy, and architecture to explore the importance of meaning in architecture, the challenges faced by the young girl in interpreting the building's identity, and the potential impact of these experiences on future engagements with the built environment broadly.

Keywords: Meaning, architecture, neuroscience, psychology, sociology, philosophy

Introduction

Tetovo is situated in the northwestern part of North Macedonia. It has a lengthy and layered history of urban development. The urban fabric of Tetovo exhibits recognizable remains from multiple historical epochs, encompassing antiquity, the Ottoman period, the Yugoslav era, and recent contemporary developments. Thus, it exhibits a heterogeneous architectural landscape characterized by significant variation in the form, style, and expression of residential structures. (Saidi et al., 2024) Buildings in appearance vary from simple, functional designs to intricate, eclectic constructions, some even rivaling the quality and aesthetics found in leading international architectural magazines. This variability indicates the absence of a singular or predominant prototype defining a typical house in Tetovo. However, upon encountering the house depicted in Figure 1.a five-year-old girl exhibited a noteworthy reaction:
The little girl: "Mother, look! Is this a brand-new school?
The mother: "No, dear, I have heard that it is a new house!

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Figure 1. Two perspectives of the house in st. 107, Tetovo, North Macedonia

A seemingly casual conversation between a mother and her five-year-old daughter regarding a new residence on Street 107 in Tetovo uncovers a profound insight: regardless of the city's varied architectural styles, inhabitants and citizens have constructed mental representations with identifiable traits of the image of the house. In this case, the child recognized the new building as a school, indicating that the building's design diverges from typical visual indicators of residential architecture in the city of Tetovo. The same perception was shared by other observers during site visits.

This observation raises several important questions: How do buildings convey meaning? What caused this particular building to resemble a school rather than a house to a young child? How crucial is it for residents and people to immediately identify a building's intended use? These inquiries have been thoroughly analyzed in architectural circles across various periods and perspectives, rendering it difficult to achieve a unified consensus. While personal interpretation is inevitable, these questions cannot be addressed solely through a subjective lens. Advancements in neuroscience, psychology, sociology, philosophy, and architecture reveal that this issue is intricately linked to human perception and interaction with the built environment, and it significantly affects individual experiences. This article, therefore, examines them through an interdisciplinary approach, drawing on insights from the cognitive and social sciences to understand how people engage with and interpret the built environment.

Furthermore, it will provide preliminary suggestions for architects on employing these insights to create meaningful built environments tailored to specific individuals and communities.

How does architecture communicate meaning?

The generation of meaning in architecture—the ways in which buildings and spatial environments are interpreted, understood, and experienced by individuals and societies—is fundamentally rooted in the mechanisms of human cognition. Meaning is not an inherent property of form or material, but rather emerges from our ongoing interaction with the built world through perception, action, memory, and socio-cultural framing. This interactive process can be simplified in a diagram that neuroscientists call the action–perception cycle (Figure). The action–perception cycle is a foundational concept in Arbib's framework for explaining the interaction of people and the built environment. (Arbib, 2021, p. Chapter 1.1.) The senses do not simply register the external world. Contrary to the notion of perception as a passive recording of stimuli, the action–perception cycle posits that our sensory systems are actively selective, guided by intentions, expectations, and prior experiences. The information an individual selects from the built environment while pursuing a particular goal is not merely received—it is actively reconstructed and interpreted based on previous encounters with similar stimuli.

Each experience is actively organized in the brain into building blocks of knowledge known as schemas. Arbib (2015, pp. 78-79) distinguishes between two fundamental types: perceptual schemas and motor schemas. Perceptual schemas are mental or neural structures that help interpret and organize sensory input. They enable the brain to recognize patterns, categorize stimuli, and make sense of environmental information. For instance, a "door schema" allows one to identify a door even when only partial or ambiguous cues are available. In contrast, a motor schema is a flexible, general plan for performing a category of movements. It is not a fixed motor pattern, but rather a dynamic template that can be adapted to various situations. While a perceptual schema interprets sensory information as a door, motor schemas activate the action-related knowledge associated with that perception—such as reaching for the handle, turning the knob, pushing or pulling, and stepping through. The specific action selected for execution depends on the individual's immediate goals and intentions.

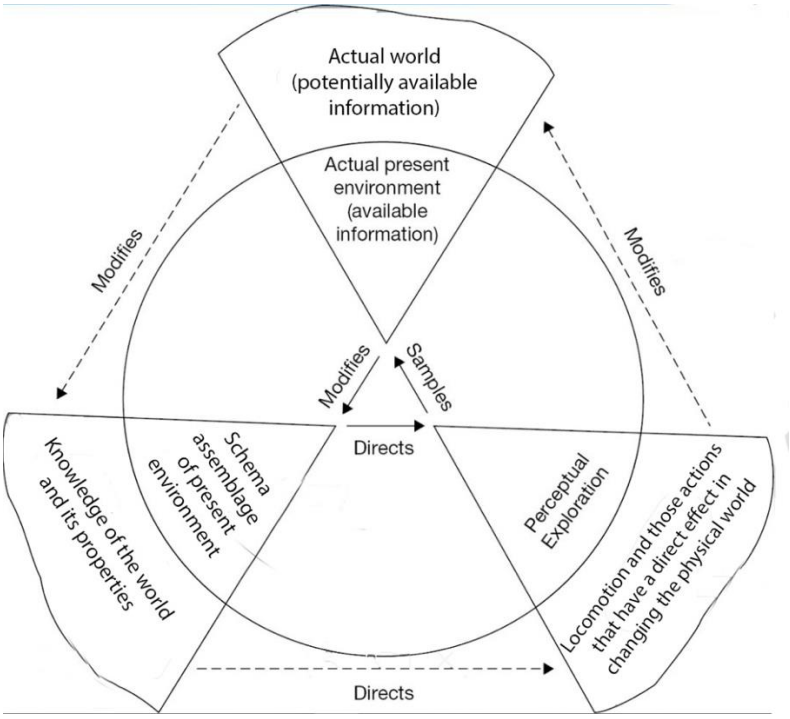

Figure 2. The action–perception cycle. Adapted from When Brains Meet Buildings, Chapter 1.1, by M. A. Arbib, 2021, Oxford University Press (ePub version). Copyright 2021 by Oxford University Press.

Understanding the environment involves more than recognizing isolated objects; it requires perceiving multiple objects and their interrelationships, while simultaneously engaging motor schemas to evaluate and act upon affordances—the action possibilities presented by objects in light of one's goals and capabilities. This continuous and dynamic interaction constitutes a parallel and competitive activation of multiple perceptual and motor schemas, which together generate experience and meaning. If the brain were to recognize an object as a computer does, pixel by pixel, that would require enormous time and energy. Instead, simultaneously coordinated multiple schemas compete in parallel to match the rough features of an object (contours, shapes, textures, colors, size …) to a previously known one, so that no further information gathering is necessary to yield understanding. (Arbib, 2021; Ellard, 2015, p. 59) Ultimately, the experience of the world and the meanings we derive from it emerge not only from immediate bodily interaction through sensorimotor capacities but also from the accumulated memory of those interactions, shaped by past experiences across varied socio-cultural contexts. This dynamic interplay reflects what Varela, Thompson, and Rosch (1991) describe as the embodied condition of the human mind, where cognition is inseparable from the body's active engagement with the world.

Adopting the VISIONS system model, developed by Ed Riseman and Al Hanson at the University of Massachusetts Amherst, Arbib (2021, p. Chapter 3.4) explains how a typical suburban scene is interpreted using solely the visual sensory system. Understanding that an object is a house involves a dynamic interaction between low-level visual processing and high-level perceptual interpretation. At the level of segmentation, or low-level vision, the visual system begins by detecting local image features such as edges, color gradients, textures, contrasts, and motion cues. These features engage in processes of competition and cooperation to grow edges and define bounded regions—yielding a first-pass subdivision of the visual field. This segmentation enables the differentiation of objects from the background and orients them within a spatial framework—typically, a vertical object (the house) resting on a ground plane,

with the sky as the backdrop. This environmental framing is critical: it anchors the object in real-world spatial logic and prepares it for semantic interpretation.

Once this initial visual organization is achieved, high-level recognition processes are engaged. Rather than constructing the scene in a pixel-by-pixel manner, the brain interprets it through the activation of schema instances—contextual representations of stored perceptual schemas in long-term memory. These instances—representing possibilities such as house, garage, shed, or storefront—are activated in visual working memory both bottom-up (driven by sensory data) and top-down (informed by prior experience, expectations, or current goals). Within this framework, multiple schema instances compete and cooperate, attaching themselves to different regions of the scene. For example, rectangular features identified during segmentation may simultaneously evoke "wall," "window," or "door" schemas. As additional contextual cues emerge—such as a sloped roof, symmetrical layout, visible entrance, and the object's grounding between earth and sky—these support the dominance of the "house" schema. Recognition thus results not from a single activated schema, but from the interplay of coordinated schema instances that reinforce one another through shared spatial and functional logic. Importantly, once a particular schema instance "wins" the competition, it reorients perceptual attention. At this stage, attention shifts from raw visual features to semantically meaningful regions—such as the facade, doorway, or roofline. These higher-level groupings not only structure perceptual focus but also guide action planning. Corresponding motor schemas may be activated in tandem, projecting possible interactions with the recognized house—such as approaching the entrance, opening a door, or navigating interior spaces—which in turn further consolidate the perceptual interpretation. (Arbib, 2021)

Recognition, then, is not a linear or static process, but a recursive, embodied cycle of perception and action. It integrates low-level feature extraction, intermediate segmentation, and high-level schema-driven interpretation—all unfolding within an embodied context where schema instances, environmental affordances, and sensorimotor capacities interact in real time to generate coherent experience. The brain perceives a complex object such as a house not solely as a static visual entity but as a significant structure for interaction, embedded within a wider spatial and cultural context. Crucially, this visual recognition is never isolated. As the perceptual system interacts with the scene, the body may simultaneously sample information through other sensory modalities - such as the echo of footsteps or a conversation on a porch, the scent of flowers or chimney smoke, or the tactile shift in air temperature under the shelter of a roof. These multisensory cues enrich and refine visual interpretation, offering corroboration or correction to what vision alone suggests. In this way, perception is not the product of the visual system alone, but of the whole embodied organism engaging with its world through an integrated network of sensorimotor pathways that together construct meaning. (Mallgrave, 2018; Arbib, 2021)

Numerous scholars who have embraced post-Cartesian approaches to the experience of the built environment—such as Norberg-Schulz (1968), Lynch (1981), Bachelard (1994), Rapoport (1990), Eco (1997), Harries (1997), White (2006), Goldhagen (2017), Mallgrave (2018), and Heidegger (Sharr, 2007)— although not all explicitly refer to the action–perception cycle as a framework, offer insights that align with its logic. In their accounts, the meaning of a building is not inherent but emerges from how it is actively perceived, interpreted, and understood by an individual. This understanding is shaped through active assessment of new sensory input against prior experiences and stored knowledge while acting in specific socio-cultural contexts. As a result, a building can communicate multiple layers of meanings (Whyte, 2006). It not only denotes its immediate utility—what Eco (1997) calls its "primary function"—but also connotes a range of symbolic and cultural associations.

Eco's (1997) notion of primary functions refers to the basic, utilitarian meanings of a setting. These are what Rapoport (1990, p. 221), classifies as "low-level" meanings, defined as "cues

for identifying uses for which settings are intended and hence the social situations [and] expected behavior." In contrast, "middle-level" meanings refer to associations with identity, status, wealth, or power, while "high-level" meanings encompass deeper cultural schemata, worldviews, philosophical systems, and the sacred. Similarly, drawing on Gestalt theory, Gibson (1950) proposed six levels of meaning: primitive concrete meaning, use-meanings, meanings of instruments and constructions, emotional or value-laden meanings, meanings of signs, and abstract symbolic meanings.

These layers of meaning are increasingly supported by insights from contemporary neuroscience and embodiment theories. As Mlodinow (2018, pp. 75-79), notes each concept or schema is composed of multiple physical, social, and emotional associations, built through lived experience. So, the "house" concept or schema stores information about the house's physical characteristics (such as walls, roof, and windows), its functional roles (like shelter, privacy, and security), its symbolic values (including family, belonging, and status), and its affective associations (such as comfort, nostalgia, or even fear). It also incorporates specific memories of events that took place in or around the house. Rather than being confined to a single representation, the "house" schema emerges from a constellation of neural patterns shaped by embodied interactions over time. Visual perceptions of a house—its façade, door, or roofline—are tightly interwoven with emotional responses, personal memories, and socio-cultural meanings. These associations are distributed across different regions of the brain and may be triggered by a variety of cues: seeing a house, hearing the word house, or recalling a related feeling that was experienced in a house. Thus, a house is not simply perceived as a physical structure, but experienced as a richly layered, embodied, and culturally situated phenomenon

What caused this particular building to resemble a school rather than a house to a young child?

The little girl's reading of a residential building as a school reveals only one dimension of how a building is experienced and interpreted—namely, its primary function, or its basic utilitarian meaning. Yet buildings communicate far more than their functional roles. As argued throughout this article, multiple other layers of meanings emerge from how a house is experienced and remembered. Without disregarding the complexity of meanings that a building can convey, this article focuses specifically on the initial confusion experienced by the little girl with the intention to open a window into the broader cognitive and embodied processes at play in expereincing the built environment. This moment of misrecognition—when the child perceives the newly constructed house on Street 170 in Tetovo as a school—provides a vivid example of what the action–perception cycle reveals about architectural experience.

The perceptual schema for "house" that the girl had developed over time, shaped by repeated encounters with familiar domestic structures, failed to align with the new building's features. Instead, certain

Figure 3. A perspectives of the house in st. 107, Tetovo, North Macedonia

architectural cues—its overall scale and shape, the proportions and arrangement of its elements, choice of materials, and surface texture—activated schema instances more closely associated with "school." Consequently, both the child and passing observers could not immediately recognize the structure as a house. This deviation from familiar schemas disrupted the recognition process. It underscores that architectural meaning is not passively absorbed but dynamically constructed through a continual negotiation among sensory input, bodily capacities, socio-cultural context, and accumulated experience. Nevertheless, should the inhabitants of the neighborhood—and people in general—immediately recognize that the building is a house or a school?

How important is to decode building's meaning?

The framework of the action–perception cycle demonstrates that cognition evolved to enable humans to respond efficiently to sensory stimuli. According to Gibson (1976), evolution equipped us with cognitive mechanisms that ensure the immediate comprehension of our surroundings, including the built environment. When individuals encounter familiar situations—where the external world aligns with their preexisting schemas of possible realities—they tend to feel comfortable and secure, as their responses can be swiftly and effortlessly activated. In contrast, unfamiliar environments, where the meaning of architectural forms is not readily deciphered, can provoke confusion and hinder meaningful interaction, ultimately discouraging exploration. As Rapoport (1990, p. 81) notes, *"anxiety ('the disease of our age') is generated in an individual when he or she has to choose courses of action without having sufficient grounds on the basis of which to make up his or her mind*" However, this does not imply that novelty or complexity is inherently undesirable. On the contrary, Kaplan et al. (1989) identified *complexity* (the richness of the environment that sustains interest for exploration) and *mystery* (the promise of further information that encourages continued engagement), along with *coherence* (the ease with which a scene is immediately understood) and *legibility* (the clarity of spatial arrangement that enables confident exploration), as four environmental characteristics that are essential for active human engagement with the built environment.

Decoding the meaning of the building is therefore a prerequisite for a user or an inhabitant to make sense of what the world presents to him. Nevertheless, the features of the building should not literally match the preexisting schemas. Depending on context and on the level of stimulation to which an individual is accustomed, a building's features should form a

composition that is mysterious to such a degree that it remains legible and coherent—or novel to such a degree that it does not induce total confusion. "*Then all the ingenuity of an architect or designer cannot make a new form functional (and cannot give form to a new function) without the support of existing processes of codification…"* (Eco, 1997). When this balance is disrupted, as in the case of the new house examined in Tetovo, the result is a loss of coherence that contributes to disorientation and alienation among users.

In vernacular architecture, buildings emerged organically from the needs, traditions, and tacit knowledge of the communities that built and used them. As a result, there was little difficulty in interpreting their symbolic content—social, functional, and cultural codes were shared and intuitively understood by both creators and users ((Norberg-Schulz, 1968; Rapoport, 1990; Eco, 1997; Whyte, 2006; Psarra, 2009). In contrast, modern architecture is often marked by a rupture in this communicative process. Rather than conveying shared meanings, modernist buildings frequently obscure or even reject symbolism, resulting in a disconnection between the built environment and its users. The modernist agenda, shaped by figures such as Le Corbusier and Mies van der Rohe, advanced a universal architectural language—what came to be known as the International Style—that emphasized rationality, functionality, and the rejection of ornament. These buildings were intended to transcend specific cultural or geographic contexts, embodying instead a vision of modernity applicable anywhere. However, as Carmona (2021, p. 162) notes, while modernists sought to eliminate overt symbolism, they could never fully escape it, because every element of the built environment carries symbolic weight, whether intended or not.

Mallgrave&Goodman (2011) observe that this schism gave rise to what many critics regard as a "crisis of meaning" in architecture, a debate that became central in the postmodern discourse. Within this context, divergent movements emerged. On one side, figures such as Robert Venturi in the United States and Aldo Rossi in Europe sought to reintroduce architectural meaning by drawing on historical, cultural, and popular references that modernism had largely rejected. In particular, Venturi (1977)), in his book Complexity and Contradiction in Architecture, championed a design approach characterized by semiotic richness—one that reflects the diversity and inconsistencies of everyday life rather than imposing rigid formal order. On the other side, deconstructivist architects such as Peter Eisenman deliberately disrupted conventional codes of architectural communication, seeking instead to free architecture from historical determinism and social prescriptions. Their approach prioritized formal experimentation and abstraction, often to the detriment of interpretive clarity (Mallgrave & Goodman, 2011).

This ongoing crisis of meaning-making in architecture is not limited to Western metropolises but is evident globally in contemporary architecture, including in North Macedonia and Tetovo, where buildings frequently fail to communicate effectively with their users. Architects often conceive buildings to express ideological or historical narratives, but these meanings are rarely perceived as intended by the general public. For instance, Jones (2011) points out that the scar-like windows of the Jewish Museum in Berlin (Figure), designed by Daniel Libeskind, only acquire their historical significance through the designer's explicit narration; without it, their intended reference to Jewish suffering remains opaque. While Ellard (2015, p. 24) praises the abstract form of Berlin's Holocaust Memorial (Figure 5) for its power to create a disorienting, contemplative environment that invites visitors to confront feelings of loss, absence, and unease as they walk in its undulating field of concrete stelae, Goldhagen (2017, p. "Intended and Unintended Experiences: Berlin's Holocaust Memorial" section) argues that in addition to eliciting these intended feelings, Peter Eisenman failed to consider the diverse range of other experiences individuals may encounter when engaging with the site. "*... Berlin has no memorial to the victims of a grisly, terrifying, history-altering genocide. What it has instead is an outsize folly that pretends to do the job, while children playfully jump its slabs, lovers steal*

kisses behind walls, and office workers picnic on the knee-high benches that await them. Visitors to the Holocaust Memorial, coming upon this urban playground, can't but note the incongruity of intent and outcome."

Understanding the meaning of a building is essential for fostering an engaging relationship with the built environment. Although interpretations are inevitably shaped by individual experience architectural meaning is not entirely subjective. Much of this understanding emerges through embodied interaction within shared cultural settings. Because humans possess similar sensory-motor capacities and are socialized through common practices, a significant degree of interpretive consistency is expected across individuals (Bentley et al., 1985) Architects must navigate a complex interplay of psychological, cognitive, and socio-cultural factors when designing for specific contexts, in order to generate forms and spaces that can be widely understood and meaningfully experienced.

The invitation to the architect is, again, to "dissect phenomenology"—to understand how different design features may differentially affect different maps in the brain, and then orchestrate them to make the building affect the user in appropriate ways, in terms of how it performs in both utilitarian and aesthetic terms. (Arbib, 2021, pp. Multiple maps in the brain, Paragraph 8)

Figure 4. *Holocaust Memorial Berlin visitors*. Retrieved from Fosh, M. (2006, September 30). *Holocaust Memorial Berlin visitors* [Photograph]. Wikimedia Commons. https://commons.wikimedia.org/wiki/File:Holocaust_Memorial_Berlin_visitors.jpg

Figure 5. Jewish Museum Berlin. Retrieved from Eichmann, G. (2017, July 28). *Berlin-Juedisches Museum-44-Aussenbereich-2017-gje* [Photograph]. Wikimedia Commons. https://commons.wikimedia.org/wiki/File:Berlin-Juedisches_Museum-44-Aussenbereich-2017-gje.jpg

Architects and theorists across disciplines have long sought to understand how architectural forms convey meaning. Since 1960, the predominant method for analyzing the meanings of buildings has been the semiotic approach. Influenced by Saussurean linguistics and structuralist theory, semiotic approach has framed architecture as a system of signs, analogous to language. Based on the idea that meaning arises from the differences between signs, it promotes the interpretation of buildings as readable images governed by formal codes. As such, they proved insufficient to capture the complex nature of architecture in terms of multiple symbolic associations that it evokes as experience of form, space, texture, atmosphere, colors… and different behaviors it produces. (Rapoport, 1990) "*If architecture truly were a language, we would be able to understand every building in the same way that we understand a written text. That is clearly not the case*" (Whyte, 2006).

Beyond the semiotic approach, comparable challenges in capturing the full scope of architectural experience and interpretation also arise within interdisciplinary research at the intersection of architecture and the cognitive sciences. Due to technological constraints, currently, much of this research is conducted in controlled laboratory environments, utilizing stimuli such as photographs, digital renderings, and virtual reality simulations. While these tools offer valuable insights, they remain limited in their ability to replicate the complex, embodied experience of individuals engaging with real-world architectural settings.

Given the limitations of both semiotic and experimental scientific methodologies in fully accounting for the richness of lived architectural experience, qualitative research methods continue to be regarded as among the most reliable tools for exploring the meanings embedded in the built environment. As Seamon and Gill **(2016)** argue, qualitative research aims to produce nuanced theories and explanations grounded in individuals' direct, situated experiences. Methods such as ethnographic observation, visual and textual analysis, and in-depth interviews allow researchers to examine the intricate, often implicit relationships between people and the spaces they inhabit. Recent interdisciplinary collaborations among architecture, neuroscience,

psychology, and sociology have significantly enriched the conceptual frameworks available for interpreting qualitative data, enabling more comprehensive understandings of how architectural spaces are perceived, inhabited, and made meaningful. These collaborations are not only deepening interpretations but are also helping formulate new research questions that lend themselves to interdisciplinary investigation, all in service of understanding architectural experience as a holistic phenomenon.

Based on the arguments developed throughout the article, it can be inferred that architectural meaning does not arise solely from individual interpretation. Instead, it emerges from cognitive structures shaped by biological evolution, personal development, and socio-cultural context. Human beings possess a biologically grounded perceptual system that has evolved to interpret environmental cues essential for survival, spatial orientation, and social connection. This evolutionary foundation gives rise to shared preferences for spatial configurations, material characteristics, and environmental patterns that communicate safety, coherence, and legibility. These inherited tendencies form a set of cognitive predispositions—an "evolved toolkit"—that provides a common foundation for perception and meaning-making across individuals and cultures. Although personal experiences and cultural norms further shape and refine these perceptual inclinations, it is essential for architects to recognize that human spatial experience is fundamentally embodied. It is conditioned by the interaction between environmental affordances and perceptual constraints. These factors shape how architectural spaces are felt, navigated, and interpreted. Therefore, architecture should not be viewed simply as an abstract or symbolic language open to unlimited reinterpretation. Rather, it is a medium grounded in deep-seated human tendencies and cognitive regularities. (Mallgrave, 2018; Arbib, 2021; Pallasmaa, 2013)

In accordance with this viewpoint, Arbib (2021) presents the Evo-Devo-Socio approach (evolutionary biology – Evo; individual development – Devo; and socio-cultural influences – Socio) as a framework for comprehending architectural experience as an integrated product of evolution, development, and culture. Consequently, he contends that social meaning emerges from the integration of individual neural schemas ("in the head") and culturally maintained interpretive frameworks ("in the group"). This integration allows architects and researchers to foresee a considerable commonality in the perception of architectural forms among various populations. The framework provides a useful perspective for comprehending the common aspects of architectural experience, while recognizing the differences brought about by personal development and cultural context.

Conclusion

This article opens with a moment of confusion experienced by a young girl as she attempts to understand the function of a newly built structure in Tetovo, North Macedonia. Using perspectives from neuroscience, philosophy, psychology, and sociology, it explores the reasons behind her difficulty in interpreting the building's purpose. At the heart of the analysis lies the idea that understanding architectural meaning is deeply connected to how humans perceive and make sense of the world—both cognitively and socially. The girl's confusion stems from the fact that the new building diverges significantly from the perceptual and social schemas she has formed through lived experience.

The discussion then turns to the broader significance of these schemas in how people navigate and feel grounded in their environments. Familiar mental and social frameworks help individuals orient themselves and maintain emotional stability within urban settings. When these schemas are disrupted too abruptly, they can give rise to confusion and anxiety during everyday movement through the city. Still, while such schemas offer an essential sense of order, the article also cautions against following them rigidly. For architecture to foster meaningful

engagement and evoke positive emotional responses, it must weave in elements of novelty, a certain level of complexity, and a subtle sense of mystery. These qualities, however, should enrich rather than override the foundational patterns that support spatial legibility and coherence.

The article consistently emphasizes that meaning-making is a process rooted in individual experience, shaped by specific socio-cultural contexts. As a result, the interpretation of the built environment tends to be inherently subjective. This presents a notable challenge for architects, who must find ways to design spaces that are legible and emotionally resonant for a wide range of users. However, the article also points out that because humans share a long evolutionary past and are often shaped within common cultural contexts, many architectural features are interpreted in similar ways by people in general, and especially within specific groups or communities.

Building on this, the article introduces a range of theoretical perspectives and methods that can assist architects in identifying and translating these shared cognitive and cultural patterns into design. It concludes by offering several practical suggestions for how designers can create environments that are more comprehensible, relatable, and emotionally meaningful to the public. In doing so, it aims to contribute to soften the persistent gap between architectural intention and the lived experience of those who inhabit and engage with built spaces.

In addition to the conceptual contributions presented, it is important to acknowledge certain limitations that constrain the generalizability of the study's findings. The article is primarily built on a single anecdotal observation, which—while effective as a narrative entry point—limits the empirical scope of the analysis. Future research could address this by incorporating a broader empirical base, such as interviews or surveys involving diverse participants, to further validate and expand upon the initial hypothesis regarding perceptual ambiguity. Likewise, although the discussion briefly references the role of multisensory cues in shaping architectural meaning, further investigation into how non-visual sensory inputs—such as sound, texture, and smell—mediate spatial perception could offer a more comprehensive understanding of embodied experience. Finally, a more detailed architectural analysis of the building's visual features in relation to both cognitive schemas and cultural expectations would help substantiate the interpretive claims. These directions not only point to promising avenues for future interdisciplinary research but also offer practical insights for architects seeking to design environments that are both legible and experientially rich.

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