



Megaron

<https://megaron.yildiz.edu.tr> - <https://megaronjournal.com>
DOI: <https://doi.org/10.14744/megaron.2025.84565>

M G A R O N

Article

A critical discourse on phenomenological reflexes of liveability in architectural design

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ARTICLE INFO

Article history

Received: 08 May 2025

Revised: 05 June 2025

Accepted: 05 June 2025

Key words:

Architectural design;
cartesian criticism; liveability;
phenomenology; place-making.

ABSTRACT

The Cartesian approach draws a sharp distinction between mind and body, adopting a rational and quantifiable understanding of the world. The phenomenological critique of the Cartesian approach emphasizes that it neglects the subject's perceptions, emotions, and experiences; instead, it argues that the mind and body perform in unity. The concept of liveability (livability), which gained significant momentum in the 20th century alongside phenomenology, encompasses notions such as well-being, happiness, and satisfaction, in addition to objective indicators focused on the quality of the physical environment. These notions demonstrate that liveability possesses a subjective dimension that is perceptual, sensory, and experiential in nature. However, liveability assessments predominantly focus on objective indicators and quantitative data, overlooking the multidimensional and complex nature of liveability that pertains to both the object and the subject. This study aims to highlight the theoretical and methodological potentials of liveability from a Cartesian-critical perspective by analyzing its phenomenological dimensions through theoretical and discursive analysis. Phenomenology offers an alternative understanding of liveability and insights for place-making by defining the subject's lived experience and bodily perception within the context of place-time. Based on thinkers such as Husserl, Heidegger, Merleau-Ponty, and Norberg-Schulz, and architects like Pallasmaa, Tschumi, Zumthor, Holl, and Aalto, phenomenologically, liveable places are environments that support human existence through multisensory experiences, emotional resonance, and embodied perception. Rather than aiming for urban perfection, liveability focuses on enhancing well-being by enriching the identity and experiential quality of places, ultimately contributing to a higher quality of life.

Cite this article as: İğci, İ. C., & Ökem, H. S. (2025). A critical discourse on phenomenological reflexes of liveability in architectural design. *Megaron*, 20(2), 222-234.

INTRODUCTION

The origins of liveability debates date back to the 1950s, a period marked by observations of disappearing open spaces, the loss of urban identity, and the declining quality

of urban living environments (Pressman, 1981). Following these concerns, the liveability of cities began to be discussed from various perspectives. While there is no precise date for the term's first usage, Ley (1980) notes that in the 1960s, an

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Published by Yıldız Technical University, İstanbul, Türkiye

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urban reform party in Vancouver advocated for liveability as a strategy against growth-oriented approaches, adopting a planning perspective centered on people rather than the economy.

In the 1980s, Donald Appleyard's book *Livable Streets* associated the concept of liveability with traffic management and mobility, leading to its frequent inclusion in the literature (Yassin, 2019). By 2009, the concept gained significant attention through a set of principles introduced by the Partnership for Sustainable Communities. During the 1990s, researchers—particularly in the U.S. and Europe—focused increasingly on liveability studies. This trend became visible in Eastern regions, especially Asian countries, in the early 2000s (Paul & Sen, 2020).

In recent decades, with accelerating urbanization on a global scale, liveability and its societal welfare implications have grown increasingly critical, forming the core motivation for studies aimed at understanding liveability (Kyttä et al., 2015).

Today, numerous national and international institutions measure the liveability of a place using objective indicators such as education, career and employment opportunities, housing and cost of living, diversity of cultural activities, and local health and safety conditions. These quantitative assessments are used to select the "world's most liveable cities" (EIU, 2024; OECD, n.d.).

On the other hand, liveability represents a qualitative construct that embodies the characteristics making a place an attractive and desirable living environment (Vuchic, 1999). Vienna, Austria which was ranked as the "world's most liveable city" in 2024 and previous years (EIU, 2024), uses the German term *lebenswert*—meaning "liveable"—to convey the notion of "worth living in" (Langenscheidt, n.d.).

Liveability is closely linked to numerous concepts, including well-being, quality of life, life satisfaction, welfare, utility, positive and negative emotions, biodiversity, and ecosystems (Ruth & Franklin, 2014; Papachristou & Rosas-Casals, 2015).

The incorporation of liveability into people's daily lives and experiences demonstrates that the concept possesses not only objective indicators pertaining to the physical environment but also a subjective evaluative dimension encompassing human perception, senses, and emotions. Researchers adhering to purely objective approaches argue that a subjective assessment of liveability is unfeasible due to variations in individual preferences. Consequently, some scholars in the literature contend that focusing on a balanced set of indicators—integrating both objective measures and subjective perceptions of environmental quality and resident experiences—would yield more meaningful results in the context of liveability (Ruth & Franklin, 2014; Kashef, 2016; Namazi-Rad et al., 2016).

This situation highlights the challenges in defining and measuring indicators of liveability, a complex and multifaceted concept. The literature contains relatively few studies that address overcoming these challenges or unlocking their potential. Figure 1 presents a synthesis of existing studies in the field, highlighting gaps in the literature and delineating the focus of this research.

Liveability studies focusing on subjective indicators and the complex nature of these indicators (Hortulanus, 2000; Boeing, 2018; Dsouza et al., 2023; El-Didy et al., 2023) appear to intersect with concepts and topics associated with phenomenology. While Cartesian critical liveability studies emerging from this relationship reveal some overlapping concepts and themes between theoretical and experimental research, they predominantly address distinct concepts and topics. Conceptualizations in the field largely stem from theoretical studies. Concepts such as meaning of life, quality of life, well-being, and happiness (Veenhoven, 2000) presented in these studies have yet to be reflected in experimental research. This underscores the challenges in translating these concepts into testable hypotheses for experimental studies and the difficulties in measuring such data.

Experimental studies far outnumber theoretical ones and cover a broad research scope. Notably, although experimental studies focus on subjective indicators, they often predominantly employ quantitative assessments and statistical methods (Salehi et al., 2017; Baig et al., 2019; Amin et al., 2020; Ho et al., 2020; Mahanta & Borgohain, 2022; Sultana et al., 2022; van Dinter et al., 2022; Zhan et al., 2023). Moreover, as illustrated in Figure 1, the expansion of experimental research to encompass concepts and topics such as rural living, sustainability, and technology (Graham & Lora, 2009; Macke et al., 2018; Zhong et al., 2020; Johnson-Woods & Feldpausch-Parker, 2022; Alshammari, 2023; Chen et al., 2023; O'Sullivan et al., 2023; Pang et al., 2024) contributes to a more nuanced understanding of the theoretical constructs introduced in scholarly work.

The differences between theoretical and experimental research reveal both significant potential and various challenges in the field of liveability studies, demonstrating the need for broader investigation of conceptual dimensions. In this context, it can be argued that the literature requires more studies focusing on the subjective dimensions of liveability.

METHODOLOGY

The study aims to highlight recent developments in liveability research and make the theoretical and methodological potentials of liveability more visible from a phenomenological perspective. The study employs

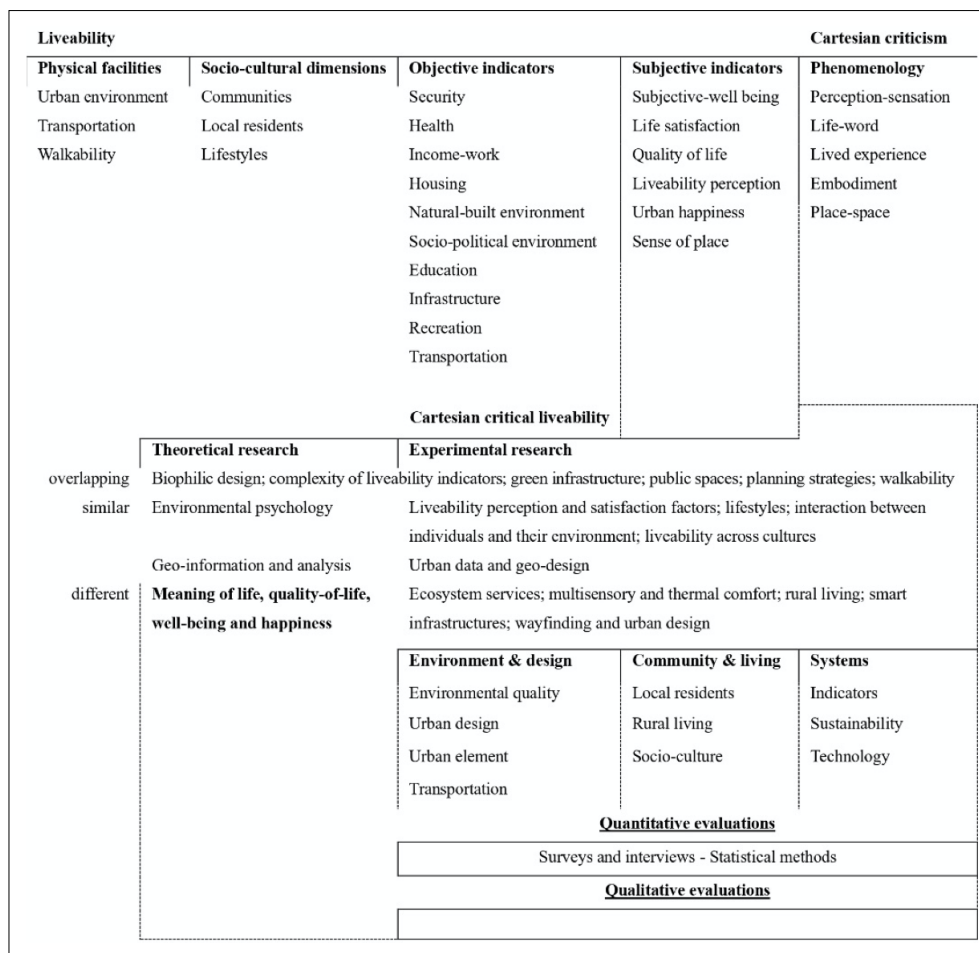


Figure 1. Cartesian critical liveability studies.

theoretical analysis and discursive analysis to provide a comprehensive examination of the liveability concept.

The theoretical analysis employs the philosophical perspective of Cartesian critique (Cartesian dualism and critical approach to the human-nature dichotomy) to reveal the phenomenological dimensions of liveability. This analysis evaluates the concept's historical evolution, inherent contradictions, and aspects open to alternative theoretical interpretations, while providing depth to understanding how liveability can be defined relationally. Discourse analysis, a widely used method in qualitative research, examines how language and narratives shape social and professional practices (Fairclough, 1995). It enables understanding of what power dynamics liveability approaches reflect and how they construct social reality.

The review has two research questions:

1. How does phenomenological perspective challenge or expand the Cartesian (objectivist/quantitative) foundations of liveability research?
2. How does phenomenological perspective reveal the theoretical and methodological potentials of liveability?

First, the study identifies pioneering approaches that lay the groundwork for a phenomenological examination of liveability. Subsequently, it traces the interactions between Cartesian critique and liveability and presents the phenomenological dimensions of liveability. Thereby, it reveals the evolving and developing dimensions of liveability within a phenomenological framework. The outcome of this study includes: (1) A discussion of the potential meanings of liveability and the characteristics of liveable places from a phenomenological perspective, and (2) an examination of their prospective capacity to generate place-making insights.

Figure 2 compiles the events, agents, actors, and discourses that reveal the phenomenological aspects of liveability. The philosophers listed in Figure 2 are not only the pioneers of phenomenology (Husserl, 2015; Heidegger, 1996; Merleau-Ponty, 1962), but also thinkers who have engaged with the concept of place (Bachelard, 2018; Gadamer, 2009; Heidegger, 1971; Norberg-Schulz, 1980). Their ideas provide the theoretical foundation for studies positioned at the intersection of architecture and phenomenology. The architects included in Figure 2 are those who have either

		Key Discourses	
Events	Eras	1950s: Rapid Urbanization	Loss of urban identity/place attachment
		1960s: Election Campaigns	Critique of growth-oriented urbanism
		1980s: Academic Adoption	Link to traffic/mobility paradigms
		1990s: Indicator Proliferation	Quantification of livability
		2009: Sustainability Policy	Livability as sustainable principle
Agents	Organizations	EIU	Revise subjective assessment ranges according to current conditions
		OECD	Integrate demographic dimensions into standardized assessment models
		AARP	Develop livability metrics that account for individual-level preferences
Actors	Philosophers	Edmund Husserl	Lifeworld as basis of experience
		Martin Heidegger	Dwelling as fundamental human existence
		Maurice Merleau-Ponty	Embodied perception and spatiality
		Gaston Bachelard	Poetics of space and memory
		Hans-Georg Gadamer	Hermeneutics of built environment
		Christian Norberg-Schulz	Place identity conservation
	Architects	Juhani Pallasmaa	Sensory architecture beyond visual primacy
		Bernard Tschumi	Architecture of events and movements
		Peter Zumthor	Material memory and atmospheric spaces
		Steven Holl	Phenomenological anchoring to site
		Alvar Aalto	Human-centered modernism and regionalism

Figure 2. Events, agents, actors, and discourses.

directly (Holl, 1989; Pallasmaa, 1996; Pallasmaa, 2005; Zumthor, 1998) or indirectly (Tschumi, 1994; Aalto, 1998) referenced phenomenology in their work. They focus on the perceptual, emotional, and experiential dimensions of architecture, emphasizing subjective experience in the architectural practice. The discourses compiled in Figure 2 are analyzed in the following sections to elucidate the phenomenological dimensions of liveability.

APPROACHES THAT LAY THE GROUNDWORK FOR A PHENOMENOLOGICAL EXAMINATION OF LIVEABILITY

The mind-body dualism of the Cartesian tradition separates the subject from the object, treating the body as an independent entity. It prioritizes mathematics over perception, reason over the senses, and establishes a mechanistic understanding of nature. The reduction of human existence to mere thought and the consideration of cognitive faculties as the sole, true, and reliable source of knowledge leads to alienation from the natural world, detaching humans both from their environment and their own bodies (Evernden, 1993). This perspective underscores how Cartesian thought reduces the richness of human-environment interaction to a purely cognitive model.

The Cartesian tradition limits the scope of human understanding and the capacity to interact with the world

through a cognitive and rationalist approach in the pursuit of truth. Orr (2004) states that while human cognitive abilities distinguish humans from other species, this leads to the neglect of other forms of knowledge, such as relational knowledge of the world. Furthermore, he explains that this approach prioritizes theories over values, abstraction over consciousness, definitive answers over questioning, and technical efficiency over ethical concerns. In this context, modern philosophy has distanced humanity from consciousness and severed its connection with the world. Orr (2004) proposes reflecting on the consequences of an approach that fails to consider different forms of knowledge alongside reason.

Building on Orr's critique of abstraction and neglect of values, Buckley expands the argument by focusing on how epistemological priorities affect environmental outcomes. According to Buckley (2013), as reason becomes the primary method for acquiring knowledge, humanity moves away from a more nuanced understanding that involves learning from the world itself. The modern epistemological orientation views the world as something to be controlled or overcome. In this context, while reason-based methods meet needs such as fuel, industry, and technology—thereby increasing humanity's capacity for survival—they simultaneously generate numerous environmental problems, including waste and pollution. This duality reveals a critical tension between technological advancement and ecological responsibility.

The belief that the outcomes of reason-based rational decisions cannot be wrong weakens humanity's capacity to question and evaluate the consequences of its own actions. Buckley (2013) argues that these actions represent signs of participation in contemporary society, which is characterized less by decision-making and more by accepted modes of existence. However, globally debated environmental issues now demonstrate that rational participation has lost its validity. In daily choices, humanity must act with awareness of the long-term consequences on both the physical environment and human life. It must observe and recognize that living in the world means being connected to it and coexisting with it. Such a recognition marks a potential shift from detached knowledge systems to more engaged and responsible ways of being-in-the-world.

Abram (1996) argues that humanity disregards nature and its necessities, a tendency reinforced by the rationalist approach that devalues sensory reality. This approach interprets the world as an infinite, and absolute resource while diminishing the significance of the embodied subject and perception. Abram's interpretation echoes a broader phenomenological emphasis on the body's primacy in shaping experience. In this sense, perception is not merely passive but participatory. Abram (1994) notes that Merleau-Ponty dedicated himself to demonstrating how perception occurs as a reciprocal interaction between the living body and the living world that surrounds it. The perception of the embodied subject constitutes the fundamental basis enabling its interaction with the environment. Through this perception, humanity gains direct experience of the world and acquires a form of intuitive understanding. Orr (2004) conceptualizes this awareness of the physical environment and living existence through the notion of "earth in mind." According to Berry (2002a), this means "reinstating the world in our awareness."

Particularly in the 20th century, the notion that philosophy essentially concerns thinking about life gained prominence; philosophy turned toward unfolding lived experience within the simultaneity of space, time, and life (Sahakian, 1990). This transformation reflects the increasing urgency to make philosophy relevant to real-world conditions and lived human experience.

In this context, phenomenology serves as a fundamental method for critiquing Cartesian knowledge.

Functioning as a general doctrine of essences, phenomenology aims to reach the essence of phenomena. It maintains that humans and the world form an inseparable whole, asserting that the subject's mind and body perform together in an active role within the world (Husserl, 1973). Given the limitations of Cartesian rationalism in addressing the experiential and embodied aspects of human existence, phenomenology provides a valuable counter-framework that positions perception as foundational to our understanding of knowledge.

PHENOMENOLOGICAL REFLEXES OF LIVEABILITY

Within the scope of Cartesian criticism, this section identifies four core phenomenological dimensions, namely the phenomenological reflexes of liveability, which redefine it as a multidimensional concept grounded in human experience. First, it necessitates a re-examination of the concept's etymology, which challenges traditional subject-object dichotomies and underscores the inseparable relationship between humanity and the earth. This reflex invites us to reconsider the Cartesian separation of human consciousness from the natural world. Second, liveability encompasses both objective and subjective indicators, acknowledging that true understanding of lived environments requires engagement with human perception, sensory experience, and emotional responses alongside measurable physical factors. This dual nature bridges the gap between quantitative assessments and qualitative experiences.

Third, liveability is inherently place-specific, engaging with the unique character, spirit, and identity of particular locations. This reflex moves beyond universal standards to recognize how local contexts shape the meaning and experience of liveable spaces. Finally, the concept calls for holistic participation, inviting individuals to engage with their environments through integrated mind-body-soul awareness. This fourth reflex synthesizes experiential knowledge with researched information, offering an alternative to Cartesian fragmentation by valuing embodied ways of knowing alongside rational analysis. Together, these reflexes provide a framework for understanding liveability that challenges reductionist approaches while maintaining critical rigor.

Etymological Roots of Liveability: Human-World Unity, and the Role of the Subject

The term "liveability" (Oxford Learner's Dictionaries, n.d.; also spelled "livability") originates from the adjective "liveable," which itself derives from the verb "to live" (Online Etymology Dictionary, n.d.). The root meaning of "live" encompasses both biological existence ("to be alive") and spatial inhabitation ("to dwell"), tracing back to the Proto-Indo-European *leip-*, suggesting permanence and connection (Merriam-Webster, n.d.; Oxford Learner's Dictionaries, n.d.). This linguistic heritage reveals liveability's dual nature: it requires both a living subject and a lived environment, framing human existence as an active, situated phenomenon.

At its core, liveability presupposes existence—a subject inhabiting and experiencing the world. Merleau-Ponty (1962) contends that the world is not merely thought but lived through embodied engagement, an inexhaustible

reality that precedes human conceptualization. This perspective challenges Cartesian dualism by asserting that human-world relations are fundamentally phenomenological. Heidegger (1996) extends this view, arguing that space is neither external object nor internal construct but an inseparable dimension of Dasein (being-in-the-world.) His concept of dwelling (1971) transcends mere occupancy, proposing that "humans are ontologically of the world" (Moran, 2000), with Earth as our primordial home that provides a common space, a place for food and community, connects all humanity (Buckley, 2013).

This unity demands recognizing humanity's reciprocal relationship with the environment—not as dominators but as mindful participants. Husserl's (1970) lifeworld theory further radicalizes this stance: the pre-given world of lived experience precedes and grounds scientific abstraction. The lifeworld, shaped by perception and culture, resists reduction to idealized formulas, positioning subjective experience as the foundation for all knowledge, including scientific inquiry (Føllesdal, 2010).

Liveability is intertwined with the essence of human existence and spatial habitation. It reflects both the biological aspect of living and the act of dwelling in a specific environment. Philosophically, it draws upon Merleau-Ponty's (1962) concept of the embodied experience of the world, where the subject's connection with its surroundings is not abstract but directly lived. While Merleau-Ponty focuses on embodied perception as the foundation of spatial experience, Heidegger deepens this view by grounding human existence ontologically in the act of dwelling. Heidegger's (1971) notion of "dwelling" further emphasizes this relationship, wherein the human subject is inseparable from the world, co-creating the experience of place. This unity of the subject and environment is crucial for understanding liveability as a fundamental, situated experience, rather than as an abstract, disconnected concept.

In architectural practice, this understanding of liveability manifests in the design of spaces that foster a profound connection between the inhabitants and their environments. Juhani Pallasmaa (2005) advocates for a multi-sensory architecture that goes beyond visual dominance, emphasizing touch, sound, and embodied experience; spaces should invite not only visual appreciation but also bodily engagement to establish a connection with their users. In his *Rovaniemi Art Museum* project (Rovaniemi, Finland, 2000), Pallasmaa refunctions a disused post office while preserving the building's historical layers. By reflecting the memory of the place through architecture, he enables visitors to form a bodily and sensory connection with the space, thus materializing phenomenological principles of liveability.

Indicators of Liveability: Based on Human Experiences, Perceptions, and Sensations

Although liveability is defined as a specific and qualitative component of the sustainability concept, its fundamental distinction lies in its greater emphasis on human experience and social factors (Szibbo, 2016). The primary reason for this is that each society—and even each individual—exhibits different expectations, demands, and conditions due to cultural background and socioeconomic status, consequently resulting in variations in liveability criteria. In this context, while the prevailing understanding of sustainability today is largely based on technical, measurable, and standardized indicators, the concept of liveability distinguishes itself by advocating for a subjective, contextual, and experience-based approach.

The Economist Intelligence Unit (EIU) stated that its Global Liveability Index required revisions and the inclusion of subjective assessments during situations like the COVID-19 pandemic in 2021. The organization explained that restrictive living conditions causing stress among populations affected liveability, necessitating a scoring system ranging from "intolerable" to "ideal" to evaluate stress and restriction levels (EIU, 2021).

The Organisation for Economic Co-operation and Development (OECD) conducts assessments across 15 member countries to examine levels of depression and anxiety risks, measuring feelings of loneliness, fragmentation, and social disconnection. The OECD reports that these experiences, along with economic conditions, show significant variations depending on age, gender, race, ethnicity, and subjective qualities, emphasizing the importance of subjective attributes for "sustainable well-being" (OECD, n.d.). The American Association of Retired Persons (AARP) employs an online tool to measure liveability, allowing individuals to personalize the index according to their own liveability criteria (AARP, n.d.).

Liveability discourses often associate "liveable cities" with subjective ideals, as reflected in terms like suitability (EIU, 2024), desirability (Vuchic, 1999), and attractiveness (Lennard, 1997). This suggests a conceptual shift wherein liveability transcends measurable criteria, becoming an experiential construct shaped by human perception, sensory engagement, and emotional resonance. In this context, certain researchers argue that assessing liveability through an objective approach is impossible, asserting instead that perception and sensory experiences play a pivotal role in the liveability experience (Porteous, 1971; Van Kamp et al., 2003; Namazi-Rad et al., 2016). The authentic assessment of liveability fundamentally depends on residents' environmental perceptions and satisfaction levels (Szalai, 1980; Cummins, 2000; Hur et al., 2010).

According to Merleau-Ponty (1962), perception is not the intentional behaviors and actions of human consciousness. The world constitutes the natural milieu of all human thoughts and perceptions. The world is what we perceive. Perception presents us with the unity of subject and world as a field of experience. This experiential field reveals the world's reality to the subject. Carman (2005) maintains that perception, memory, judgment, and expectations are neither states nor properties of the mind, but rather elements that directly orient us toward, unite us with, and bind us to the world. This account strengthens the phenomenological position that consciousness is always situated and relational. Şan (2017) explains that perception serves as a foundational source accompanying all other phenomena. In this context, perception is not only the starting point of knowledge but also the existential ground upon which human-world relations are constituted. The philosophy of perception constitutes not merely a philosophy about the perceiving subject, but equally a philosophy that teaches us about perception itself. Consequently, Merleau-Ponty's approach involves not only thinking about perception but also structuring thought in accordance with perception. Perception describes an experience where active qualities emerge, demonstrating that humans are not passive recipients of external qualities but rather embodied perceiving subjects.

Prioritizing human perception and senses in liveability assessments does not negate the necessity of scientific research. In this context, phenomenology's role is to demonstrate that science cannot depict a world devoid of unanswered questions. It unsettles scientific dogmatism, which regards rational knowledge as absolute and complete, and instead creates space within the scientific domain for life-world, lived experience, and, particularly, perception. Merleau-Ponty (1962) asserts that phenomenology demands we continually relearn from the world—a realm of direct, immediate experiences and intertwined relations—and expects meaning to be grasped through awareness and existence. Thus, rather than engaging in theoretical inquiries, phenomenology proposes narrating the story of all our relationships and experiences in the perceived world (Bognar, 1985).

Architectural phenomenology places humans at its core, moving beyond analytical processes, methodological frameworks, or physical environments. It advocates for a conscious and attentive engagement with the built environment, emphasizing the significance of perception and emotions. In doing so, it seeks to define phenomena through "pure looking at" or "viewing its essence," distinguishing them from mere sculptural objects, without reducing the environment to its physical qualities alone (Pallasmaa, 1996).

The experience of liveability cannot be reduced to mere quantitative measures, as it hinges on subjective human

perceptions and emotional responses to the environment. This aligns with Merleau-Ponty's (1962) philosophy of perception, where liveability is not just a condition but a sensory, lived reality. The human perception of space—shaped by individual and collective experiences—forms the essence of what constitutes a liveable place. This perspective challenges the purely objective measurements often used in urban planning, asserting that the true measure of liveability lies in how spaces are experienced by their inhabitants.

In architectural practice, Tschumi (1994) explores architecture as a dynamic field shaped by events, sequences, and user interactions, challenging static spatial norms. In designs like the *Parc de la Villette* (Paris, France, 1982–1998), Tschumi transforms architecture into a medium for the unfolding of human experiences, where the environment becomes an active participant in daily life. The spatial dynamics, events, and movements within these spaces are integral to the liveability of the place, enhancing human interaction and engagement. Similarly, Steven Holl employs phenomenological strategies to ground architectural form and experience in the specific qualities of place. The *Chapel of St. Ignatius* (Seattle, USA, 1994) explores the relationship between light, space, and time in a sensory and experiential manner, imbuing the spaces with distinct atmospheric qualities. By using light as a fundamental element that shapes perception, Holl embodies phenomenological principles that contribute to the creation of liveable environments.

Description of Liveable Place: The Unique Character and Spirit of Place

Girardet (2004) defines a liveable city as one with well-defined neighborhoods where basic facilities are within walking distance, featuring attractive public spaces, a vibrant street culture, good connectivity, affordability, and cleanliness. Lennard (1997) identifies the primary factors that enhance well-being as: a central neighborhood square, urban spaces designed at a human scale, a safe and comfortable pedestrian network, visual enclosure that strengthens a sense of belonging, diversity and complexity that encourage exploration, natural elements that enhance sensory pleasure, clear spatial relationships between familiar personal spaces and significant structures, meaningful experiences, and appropriately designed seating arrangements. Vuchic (1999) describes liveable places as comfortable, efficient, and conducive to recreation. Gehl (2011) adds that liveable places facilitate encounters, ease movement, and ensure human presence. Jacobs (1961) also emphasizes the importance of creating mixed-use urban areas to promote urban diversity and support human presence in the urban fabric, which is crucial for safety. Bentley et al., (1985) aimed to identify the social, psychological, and physical factors that contribute to the quality of life in an urban community and concluded that the character of a place is a key indicator of its liveability.

In summary, the liveability of a place is related to the local qualities that distinguish it, make it stand out, or relegate it to the background (EIU, 2024).

While there are numerous definitions of a liveable place in the literature, the common thread among them is that liveability emerges as a place-based concept, encompassing aspects related to a place's character, meaning, and distinctiveness (Ley & Newton, 2010). According to Giap et al., 2014, although liveability is considered an umbrella concept covering many interrelated issues, its dominant focus appears to center on place character and the local environment.

According to Norberg-Schulz (1980), phenomenology serves as a means to understand and analyze the concept of place—where analytical and scientific methods fall short—by revealing its unique character and potential meaning. Places possess a distinctive spirit, *Genius Loci*, which accompanies individuals from birth to death. This spirit refers to the qualities that define a place—its environmental character and overall atmosphere—encompassing descriptive elements such as materiality, form, texture, and color. Since the dawn of human existence, people have sought to create places that reflect the essence of being. In this context, the purpose of architecture is to provide an existential foothold, and its task is to create meaningful places (Norberg-Schulz, 1980). This understanding of place aligns closely with Heidegger's ontological approach, which emphasizes the deep connection between being and spatial existence. Heidegger (1971) describes this as the moment when a place is brought into being through construction—a process of dwelling. Similarly, Sharr (2013), summarizing Unwin's view, refers to this as the “definition of place.”

On the other hand, architecture must respond to the multiplicity of human life modes. According to (Norberg-Schulz, 1971), humans seek to express and enact their intentions in daily life, and in this context, their actions are neither homogeneous nor uniform in character. Consequently, they require places of differing characters to accommodate diverse activities.

Thus, a place may be “protective, practical, festive, and solemn”; a landscape may be “natural, barren, fertile, smiling and threatening (Norberg-Schulz, 1980). While such descriptors may sometimes fall short in capturing complex interrelationships, they invariably convey essential qualities of a place's essence. Within this framework, conceptual categories such as artificial-natural, interior-exterior, and horizontal-vertical can be established.

The approach proposed by Norberg-Schulz (1971; Norberg-Schulz, 1980) shifts focus from abstract or mathematical representations to the sensory character and perceptible atmosphere of a place, enabling the revelation of its essence and the comprehension of place's realities. Phenomenology achieves this not through explanation or analysis, but through description (Merleau-Ponty, 1962).

A liveable place is not only defined by functional aspects but by its unique character, which shapes the human experience of space. According to Norberg-Schulz (1980), architecture must embody the spirit of the place, or *Genius Loci*, which ties the environment to human experiences and cultural memory. This conceptualization of place emphasizes the importance of context, materials, and atmosphere—elements that help create a meaningful, lived experience within architecture.

In architectural practice, Alvar Aalto's (1998) works—such as the *Saynatsalo Town Hall* (Saynatsalo, Finland, 1952)—blend modernist principles with human-centered design and regional sensitivity, emphasizing empathy, nature, and cultural context. Aalto's designs interact with their local settings, employing natural materials and textures to harmonize with human scale and cultural background. His buildings are not only functional but also imbued with a sense of place that strengthens the bond between the space and its occupants. Aalto's architecture exemplifies how liveability can emerge through the integration of environmental and cultural factors, creating spaces that feel both intimate and universal.

The Practice of Liveability: Synthesizing Experiential Knowledge with Investigated Knowledge

Liveability demands more than theoretical understanding—it requires an embodied, participatory engagement with the world that bridges the gap between abstract knowledge and lived experience. This holistic approach recognizes that truly liveable environments emerge from the synthesis of investigated (Cartesian) knowledge and experiential (phenomenological) wisdom.

The path to liveability involves cultivating what Berry (2002a; 2004) describes as a radical reorientation—from assuming human benefit drives environmental health to recognizing that planetary wellbeing fundamentally sustains human flourishing. This shift requires moving beyond what Moran (2000) describes as alienation to earth toward what Buckley (2013) frames as conscious reconnection through sensory immersion in natural processes: smelling rain-drenched soil, feeling the texture of terrain underfoot, or witnessing seasonal transformations. These embodied encounters ground abstract ecological principles in tangible reality, fostering what Merleau-Ponty (1962) identifies as the indispensable dialogue between scientific understanding and first-person experience. Our fundamental connection with the world cannot be fully grasped through objective analysis alone; it must be experienced and felt through bodily participation.

Urban spaces aiming for liveability, should balance measurable factors like infrastructure quality with less tangible but equally vital elements—the play of light through tree canopies, the acoustic texture of public squares, or the

tacit social rhythms that animate neighborhood streets. As Buckley (2013) notes, this synthesis operates reciprocally: just as research should inform how we live, lived experience must continually refine our research priorities.

Engaging with liveability means embracing what Berry (2002b) calls the great work of our era—cultivating modes of existence that honor our profound entanglement with the more-than-human world. This involves neither rejecting scientific knowledge nor privileging raw experience, but rather sustaining the creative tension between them. In doing so, we move toward what Heidegger (1971) envisioned as dwelling—not merely occupying space, but participating meaningfully in the ongoing story of place. The measure of true liveability lies in this capacity to weave knowledge into lived practice, creating environments that don't just sustain life, but make being alive a continually unfolding discovery.

The practice of liveability requires an integration of both subjective, experiential knowledge and objective, scientific knowledge. This synthesis reflects a deeper understanding of how humans interact with their environment, moving beyond theoretical abstractions toward lived experiences that are grounded in sensory engagement and ecological awareness. The idea of "dwelling" proposed by Heidegger (1971) emphasizes this participatory relationship with the world, where liveability is not merely an outcome but an ongoing, embodied process.

In architectural practice, Zumthor (2006) interprets architecture as an art of space and time. Zumthor focuses on materiality and sensory atmosphere, creating emotionally resonant spaces rooted in memory and tactile experience. His *Therme Vals* (Vals, Switzerland, 1996) is an example of place-making where both intellectual and sensory experiences, such as light, sound, and tactility, resonate. Zumthor invites not only visual observation but full bodily engagement with the space. At this point, liveability transcends the physical, encompassing emotional and sensory responses to create living spaces in resonance with human experience. Zumthor creates a liveable place by interpreting his environmental research to add experiential qualities to the building.

DISCUSSION AND CONCLUSION

The Cartesian tradition reduces the world to a calculable, measurable object—a technical realm stripped of its worldhood. As Polt (2005) underscores in his reading of Heidegger, this tradition's subject-object dichotomy severs humans from the lived fabric of daily existence. Heidegger's critique, reclaims the world as a liveable place through the concept of *Erlebnis* (lived experience), where life is not biological survival but a trajectory of meaning, failures, and successes embedded in place (Polt, 2005). Here, the world

emerges not as an abstracted "object" but as a contextual structure. This relational ontology rejects Cartesian dualism—the subject-object dichotomy—asserting that lived experience only becomes real within the holistic structure of place, where humans dwell.

In Cartesian approach, understanding is solely achievable through reason, whereas in phenomenological approach, experiences constitute the fundamental source of knowledge. Phenomenology, entirely eschewing objectifying sciences, is a philosophical method, a mode of thought, and a teaching endeavor seeking to describe the purposeless experiences of the subject in relation to the world and the subjective orientations of our consciousness. It is an inquiry into how the subject experiences and constructs the world. Phenomenology allows to access the essences of phenomena questioning existing knowledge and without benefiting from ready-made knowledge (Husserl, 1973). Phenomenology achieves this without theorizing or mathematizing - by comparing, distinguishing, connecting, relating, dividing into parts, and breaking down into elements. It makes no explanations in the sense of deductive theory (Husserl, 2015).

Phenomenology integrates the subjective realm into the natural world: it engages with multiple domains of knowledge to better comprehend human-world connectedness and lived experience (Moran, 2000). By addressing not only rational cognition but also perceptual knowing, phenomenology facilitates both the disclosure of potential meanings tied to liveability's subjective dimensions and the exploration of the subject's role in constituting a liveable environment.

The phenomenological approach demonstrates the possibility of an experiential understanding of place—one grounded in human bodily perception and focused on the "here and now" (Moles, 2012). Phenomenology's examination of human existence across temporal and spatial dimensions unveils the multilayered and holistic nature of liveability - a structure intrinsic to both the experiencing subject and the experienced world.

Phenomenology is fundamental methodological framework for comprehending human nature and elucidating individual behaviors and distinct perceptions (Seamon, 2000). As posited by Nickerson (2002), human actions and behaviors, wield significant influence over the prospective of planet Earth's future. As scientific research on the environmental impacts of human actions expands, a paradigm shift is occurring - from models asserting human dominion over Earth to what Dunlap (2008) terms the "New Ecological Paradigm", which conceptualizes humanity as fundamentally interconnected with and integral to the world system. According to Buckley (2013), phenomenology enables a transition to a new paradigm that conceptualizes humanity as the recipient

of all consequences of its actions. The phenomenological approach enables the understanding and maintenance of liveability's essential conditions, integrates liveability into daily actions and behaviors, and frames liveability as both a way of life and a subject of inquiry. Liveability necessitates listening to and comprehending the messages the world seeks to convey, while cultivating consciousness and awareness toward our environment. The phenomenological approach conceptualizes liveability not merely as a notion interwoven with the objective qualities of one's lived environment, but also as an expression of poetic sensitivity toward the world.

Based on thinkers such as Husserl, Heidegger, Merleau-Ponty, and Norberg-Schulz, and architects like Pallasmaa, Tschumi, Zumthor, Holl, and Aalto, phenomenologically, liveable places are those that confer meaning upon human existence through embodied experiences, generate perceptual-sensory pleasures and affective resonance, orchestrate the multisensory interplay of lived place, support both human and life itself, and actively sustain the very possibility of human flourishing. In this context, liveability does not pursue comprehensive perfection in the urban environment; rather, it focuses on evaluating and enhancing the fundamental factors that influence a community's well-being and happiness, revealing the identity and character of places while making them more desirable to experience - thereby improving overall quality of life. Figure 3 presents the potential meanings of liveability and the characteristics of liveable places from a phenomenological perspective.

Figure 3 reveals that liveability from a phenomenological perspective includes concepts such as "meaning of life," "quality of life," "well-being," and "happiness." These concepts have emerged as exemplary potential concepts in Cartesian critical liveability studies, highlighting that theoretical and experimental research focus on different concepts (Figure 1). In this context, the study demonstrates that the theoretical and methodological potentials of liveability are more visible from a phenomenological perspective, and that liveability potentially includes these concepts.

This study's phenomenological critique of Cartesian rationalism reframes liveability as a dynamic, relational phenomenon rooted in embodied experience, temporal-spatial situatedness, and emotional connection—rather than static metrics. By exposing the limitations of dualistic, calculative paradigms, the research reveals that truly liveable places: Prioritize sensory richness and bodily engagement, foster a sense of belonging and place through historical/contextual continuity, and focus on enhancing quality of life and subjective well-being alongside the qualities and functionality of the physical environment. Ultimately, they are places that evoke a sense of being worth living. For place-making, these insights demand a shift from abstract standards to lived experience-centered design. Rather than merely deconstructing Cartesian worldview, the study also offers phenomenological dimensions of liveability as constructive directions for creating more humane and meaningful environments.

Philosophers / Architects	Expanded Key Discourses	Potential meanings of liveability and characteristics of liveable places from a phenomenological perspective
Edmund Husserl	Scientifically lived experience	Prioritizing subjective lived experience through the exploration of everyday life • <i>Focusing on liveability perception</i>
Martin Heidegger	Existential unity of human and world	Supporting humans and life; sustaining the possibility of human flourishing • <i>Contributing to personal fulfillment</i>
Maurice Merleau-Ponty	Sensory experience, body-space interaction	Conferring meaning upon human existence through embodied experiences • <i>Revealing the meaning of life; creating desirable experiences</i>
Gaston Bachelard	Place-memory relation and emotion	Generating resonance and emotional depth; revealing lived character of place • <i>Fostering a sense of belonging</i>
Hans-Georg Gadamer	Meaning revealed through hermeneutics	Interpreting spatial tradition and meaning; enhancing continuity and memory • <i>Maintaining subjective well-being</i>
Christian Norberg-Schulz	Embodiment of <i>genius loci</i> (the spirit of place)	Revealing the identity and character of places; reinforcing contextual meaning • <i>Creating a sense of place</i>
Juhani Pallasmaa	Polyphony of sensory experience	Orchestrating multisensory interplay; evoking perceptual-sensory pleasures • <i>Providing spatial joy, happiness</i>
Bernard Tschumi	Space as a field of interaction	Fostering dynamic space use; supporting personal engagement • <i>Reinforcing spatial interaction and social cohesion</i>
Peter Zumthor	Atmospheric effect of material	Creating atmospheres; evoking intimacy; encouraging tactile experience • <i>Creating a sense of satisfaction and a place worth living in</i>
Steven Holl	Human-space-time relationship	Enhancing spatial-temporal experience; supporting human-place symbiosis • <i>Harmonizing with place and time</i>
Alvar Aalto	Local settings, cultural background	Focusing on local, human-centered factors instead of idealized environments • <i>Improving quality of life</i>

Figure 3. Potential meanings of liveability and characteristics of liveable places from a phenomenological perspective.

ETHICS: There are no ethical issues with the publication of this manuscript.

PEER-REVIEW: Externally peer-reviewed.

CONFLICT OF INTEREST: The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

FINANCIAL DISCLOSURE: The authors declared that this study has received no financial support.

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