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Dipartimento Architettura e Design

Master Degree Course in Architectural Composition | **AC**

Animism: Living Interface

Reframing Architectural Space through Posthuman Perspectives

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Abstract

This thesis approaches animism as an epistemological and relational interpretive lens for rethinking architectural space, rather than as a metaphysical truth-claim. Instead of treating animism as a belief system, it is reframed as a conceptual framework that reveals relational modes of interaction between human and nonhuman entities within spatial experience.
Situated at the intersection of architecture, philosophy, and posthuman thought, the research investigates how animist relationality challenges object-centered and human-centered paradigms of modern architectural thinking. The research explores the transformation of animist thought from its early anthropological interpretations to its contemporary reformulation within phenomenology, new materialism, and posthuman theory.

La tesi affronta l'animismo come lente epistemologica e interpretativa di carattere relazionale per ripensare lo spazio architettonico, evitando di assumerlo come verità metafisica. L'animismo viene qui riletto non come sistema di credenze, ma come quadro concettuale capace di rendere visibili le dinamiche relazionali tra umano e non-umano che attraversano l'esperienza spaziale.
Collocata all'intersezione tra architettura, filosofia e pensiero postumano, la ricerca indaga come la relazionalità animista metta in discussione i paradigmi oggetto-centrici e antropocentrici del pensiero architettonico moderno. Lo studio segue la trasformazione dell'animismo dalle prime letture antropologiche alla sua rielaborazione contemporanea nell'ambito della fenomenologia, del nuovo materialismo e della teoria postumana.

Keywords:

animism, agency, epistemology, phenomenology, posthumanism, relationality

Why Animism ?

Personal Reflections and Cultural Context

" *O Exalted Tengri, hear me,*

Waters, hear me,

Spirits, hear me,

Come, come, come! "

Anonymous. (n.d.)

Kam's Invocation (Oral tradition of Turkic shaman ritual poem)

A year ago, I was discussing with my Turkologist sister, Tuba Dasdemir, about the ancient beliefs of the Turks. We had been discussing prehistoric beliefs of Turks before the Islamic religion. Before the religion entered our history, our ancestors performed shaman rituals, they danced with spirits, looked to eagle feathers for omens, and saw the world as a network of connections, not a hierarchy. She also stated that shamanism is mentioned in the Manas Epic and Dede Korkut stories, where people worship natural items such as mountains, trees, and rivers, and communicate with their spirits. That conversation sparked my thoughts on the cultural and spiritual significance of animism. Growing up as a Turkish student between minarets and the city noise of Istanbul, I often heard whispers of those ancient stories: how elders in Cappadocia still speak of mountains as living kin, not just rocks, or in the highland villages of the Black Sea, elders speak of the forests and rivers as living entities that guide the community and teach how to respect the nature.

Months later, when my supervisor Prof. Alessandro Canevari asked me, *"Why animism? What does animism mean to you? "* Everything converged. I realized that my interest was not merely

nostalgia; instead, as an architect, it had evolved into a critical inquiry. I initially began with a simple yet fundamental question: *how can architecture be read through an animist lens*? *And what would that change?*

This question gradually unfolded into a broader investigation of how animism might inform architectural practice by shaping spaces that embody the relational interconnectedness of humans, nature, and the spirit of place. Embracing animism allowed me to both reclaim my heritage and to rethink architecture not as an isolated human construct, but as a medium through which humans, nature, and spirit are brought into relation.

Dedication

to my parents

and Ahmet Basar Sogut …

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Terminology

Animism: The view that everything in the Universe, including even plants and inanimate objects, has some kind of psychological being more or less tenuously similar to that of human and non human animals (A dictionary of philosophy, 1979).

Agency: In sociology and philosophy, the degree to which a subject is able to determine the course of their own actions (A dictionary of critical theory, 2010).

Cognitive Science: An interdisciplinary research cluster that seeks to account for intelligent activity, whether exhibited by living organisms or machines (The Cambridge dictionary of philosophy, 1999).

Embodied: The bodily aspects of human subjectivity (The Cambridge dictionary of philosophy, 1999).

Epistemology: From Greek episteme, 'knowledge', and logos, 'explanation', the study of the nature of knowledge and justification (The Cambridge dictionary of philosophy, 1999).

Ontology: In philosophy, the theory of the existence of things, it seeks to answer the question why there is something rather than nothing (A dictionary of critical theory, 2010).

Terminology (cont'd)

Perception:	The extraction and use of information about one's environment and one's own body (The Cambridge dictionary of philosophy, 1999).
Phenomenology:	A philosophy of the intentional being of consciousness (A dictionary of critical theory, 2010).
Post Humanism:	It rejects the dividing line between human and non-human is difficult to delineate in the first place and highly permeable too (A dictionary of critical theory, 2010).
Vibrant Matter:	To dissipate the onto-theological binaries of life/matter, humanfanimal, will/determination, and organic/inorganic using arguments and other rhetorical means to induce in human bodiesan aesthetic-affective openness to material vitality (Bennett, 2010, p. x).
Vitality:	The capacity of things edibles, commodities, storms, metals (Bennett, 2010, p. viii).

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List of Abbreviations

ANT	Actor - Network Theory
BwO	Body without Organs
ETFE	Ethylene Tetrafluoroethylene
FGF	Fused Granulate Fabrication
RD	Reaction - Diffusion
UV	Ultraviolet
VR	Virtual Reality
XR	Extended Reality

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Chapter 1

Introduction

Animism has long been interpreted within Western intellectual traditions as a pre-modern belief system that attributes life or spirit to nonhuman entities. Such readings, rooted in evolutionary and rationalist frameworks, positioned animism as a primitive stage to be superseded by scientific modernity. However, recent theoretical developments, particularly within anthropology and philosophy, have reconsidered animism as a dialogical and interpretive lens rather than solely as a system of belief. Within these debates, humans, nonhumans, materials, and environments are approached not as separate domains but as elements understood through their interactions, rather than as inherently constituted in this way.

Despite the growing influence of these discussions across disciplines, their implications for architectural thought remain insufficiently explored.

Contemporary architectural theory, by contrast, largely operates within frameworks that position space as a designed object, an optimized system, or a neutral container for human activity. Within this paradigm, the built environment is often understood through functional, technical, and representational logics that privilege stability, control, and human intention. Such orientations reflect deeper epistemological assumptions rooted in Western dualisms (nature and culture, subject and object, mind and matter) which separate human agency from the material and environmental worlds. Consequently, architecture is often conceived as a product imposed upon a passive context, while materials, atmospheres, and environmental processes remain secondary to formal and programmatic concerns.

In parallel, recent decades have seen significant shifts across anthropology, philosophy, cognitive science, and ecological thought that question these divisions. Phenomenology has emphasized embodied perception and lived experience, while enactive and embodied cognition theories reconceive perception as an active process emerging through organism–environment interactions. Posthuman and new materialist approaches have further destabilized notions of inert matter, emphasizing distributed agency, relationality, and process.

Yet, although these strands reconsider the human–world relationship, their intersection with architectural thinking has not been fully through an animist interpretive perspective.

This thesis addresses this gap by investigating animism as an interpretive lens for rethinking architecture. It proposes repositioning architecture not as a passive object, but as an interpretable living interface that can be understood as mediating shared experiences among human and nonhuman actors.

Space is thus approached not as a stable container but as something that can be viewed as continuously constituted through relations**.**

Importantly, this research does not claim that architecture is literally "alive," nor does it present animism as an ontological truth. Instead, animism is explored as a conceptual and methodological tool that makes visible dimensions of reciprocity, material participation, and environmental co-constitution that tend to be overlooked within object-centered approaches. By bringing animist thought into dialogue with phenomenology, enactive cognition, and posthuman theories of material agency, the research develops a conceptual ground for understanding spatial experience as embodied, interactive, and distributed.

Through interpretive engagements with selected architectural works and spatial situations, and informed by phenomenological and neurophenomenological perspectives, this thesis examines how material agency, atmospheric conditions, and environmental processes can be understood as participating in the formation of spatial experience.

Rather than proposing a prescriptive design model, the research advances a conceptual contribution to architectural theory. In this sense, the thesis does not merely reframe architecture but repositions spatial experience itself as a process that can be interpreted as an ongoing co-constitution between human and nonhuman actors. In doing so, the research aligns with emerging ecological and posthuman sensibilities, providing a theoretically grounded approach to reconsider materiality, environment, and relationality in architecture.

1.1 Research Question(s)

This thesis is structured around the following fundamental research question:

Main Research Question:

How can architecture be rethought through an animist conceptual lens as a living interface, understood as a co-constituted process among human and nonhuman actors, and how does this perspective challenge the objectifying logic of modern architectural thought?

Secondary Research Questions:

I. How has animism been reframed as a relational approach in historical and contemporary theory, and how does this perspective reconfigure the nature–culture divide within architectural thought?

II. When phenomenology, enactive cognition, and posthumanist thought are considered alongside animism, how can spatial experience be understood as a co-constituted process among human and nonhuman actors?

III. How can the agency of matter, time, and nonhuman actors be interpreted in architectural elements such as facades, thresholds, floors, and atmospheres, and what forms of spatial attentiveness does this suggest for architectural thinking?

IV. When an animist lens is engaged with selected architectural cases and experiential vignettes, what relational dynamics contribute to understanding space as responsive or participatory?

1.2 Aim

The primary aim of this research is to investigate animism as an epistemological lens within architectural thought. Through this lens, the thesis seeks to move beyond an understanding of space as an objectified product and instead to understand it as a co-constituted process that continually emerges through interactions among human and nonhuman actors.

By engaging architectural works and spatial situations from this perspective, the research draws attention to dimensions of material agency, environmental reciprocity, and relational dynamics that often remain underarticulated within object-centered approaches to architecture. In doing so, it aims to contribute conceptually to more relational modes of architectural thinking aligned with ecological sensitivity and posthuman ethics.

Objectives

In line with this aim, the research is guided by the following objectives:

- **First axis for animism:** To synthesize the historical evolution of animism and its contemporary theoretical reframings, particularly through Philippe Descola (ontological classification), Eduardo Viveiros de Castro (perspectivism), and Tim Ingold (relational ecology), and to situate these discussions within architectural thought.

- **Second axis for embodiment:** To explain spatial experience as a relational and co-constituted process by bringing phenomenology Maurice Merleau-Ponty (embodied perception), Martin Heidegger (being-in-the-world), Juhani Pallasmaa (sensory experience) into dialogue with enactive cognition, including Francisco Varela (enactive cognition) and Antonio Damasio (somatic marker hypothesis). In this way, embodiment is approached as an active perceptual and sense-making process through which spatial relations can be understood as continuously constituted.

- **Third axis for matter/agency:** To examine how agency can be interpreted as distributed across matter, time, and nonhuman actors, drawing on Jane Bennett (vibrant

matter), Karen Barad (intra-action), and Bruno Latour (actor-network theory), and to explore how these perspectives inform the understanding of architectural elements such as materials, atmospheres, thresholds, and facades through interpretive readings.

- To concretize animist–spatial relations through interpretive analyses of selected architectural cases and experiential vignettes, revealing interactions among human and nonhuman actors.

- To develop conceptual orientations for more open, adaptive, and relational approaches to architectural thinking based on these analyses.

Finally, while the theoretical framework draws on a wide variety of authors and traditions, the research maintains a critical distinction between their positions. Rather than treating these contributions as a unified theoretical whole, it preserves conceptual clarity by recognizing the specific role of each author within the argument. This approach prevents the blending of different perspectives.

1.3 Scope

Theoretical Scope

This research approaches architecture primarily as an experiential question rather than as a technical, structural, or typological problem. Its scope is therefore situated within architectural theory and philosophy, engaging in interdisciplinary dialogues with anthropology, phenomenology, cognitive science, and posthuman thought.

The research focuses on animism and explores its potential as an epistemological lens for understanding architecture as a co-constituted process. Within this framework, space is examined not as a fixed physical container but as a field of relations that can be understood as emerging through interactions among bodies, materials, atmospheres, temporal processes, and environmental forces.

Disciplinary Scope

While architectural theory and criticism constitute the primary disciplinary framework, the research adopts an interdisciplinary approach. It engages anthropology (Philippe Descola, Eduardo Viveiros de Castro, Tim Ingold), philosophy (Maurice Merleau-Ponty, Gilles Deleuze and Félix Guattari, Bruno Latour), cognitive science and neuroscience (Francisco Varela, Antonio Damasio), and ecological thought (Timothy Morton, Eduardo Kohn) to develop a relational understanding of space that extends beyond conventional architectural discourse.

Spatial and Scalar Scope

The analysis operates across multiple spatial scales, ranging from body–space interactions (such as thresholds, handrails, and ground surfaces) to building-scale elements (facades, atmospheres, material patinas) and broader urban or ecological relations (including water, soil, and vegetal agencies). The selected examples are primarily contemporary and internationally situated (e.g., Peter Zumthor, Neri Oxman, Carlo Scarpa, Herzog & de Meuron).

Additionally, the research also acknowledges a Turkish–shamanic cultural background as a personal and conceptual point of departure rather than as an ethnographic focus.

1.4 Limitations

This research is conceptual and theoretical in nature and does not seek to establish empirical or measurable claims about spatial experience. While drawing on ideas from cognitive science and neuroscience, these fields are engaged at a theoretical and interpretive level rather than through experimental methods, quantitative data, or physiological measurement.

The research does not claim that architecture is literally “alive,” nor that animism constitutes an ontological truth. Instead, animism is employed as a methodological and interpretive framework through which spatial relations can be understood as co-constituted processes

involving human and nonhuman actors. The aim is interpretive and conceptual rather than metaphysical or scientific.

Although the thesis engages with anthropological discussions of animism, it does not attempt to represent or analyze specific Indigenous cosmologies in depth. Cultural references serve as conceptual inspirations rather than ethnographic case studies, and the research does not claim cultural authority over these traditions.

In terms of architectural analysis, the selected cases are not intended to form a comprehensive historical survey or typological classification. They are approached as interpretive instances that illuminate relational dynamics rather than as representative samples. The study does not provide prescriptive design guidelines, technical solutions, or performance criteria; its contribution remains at the level of theoretical reframing. Design implications discussed in the research are conceptual and principle-based, and the research does not include the development of a complete architectural project, technical detailing, or implementation simulations.

1.5 Methodology

This thesis adopts a qualitative, theoretical, and interpretive methodology. Rather than relying on empirical measurement or quantitative analysis, it operates through conceptual inquiry and relational reading across disciplines, emphasizing the relational and co-constituted nature of spatial experience.

1. **Theoretical Literature Analysis**

The research begins with a critical engagement with literature in anthropology, philosophy, architectural theory, cognitive science, and posthuman thought. Concepts such as animism, relationality, embodiment, enactive cognition, and material agency are examined not as isolated theories but as interrelated frameworks that collectively offer ways of understanding space as a process continually shaped by interactions among human and nonhuman actors.

2. Conceptual Synthesis

Building on this review, the research develops a conceptual synthesis that positions animist relationality as an epistemological lens for architecture. This synthesis does not aim to unify these theories into a single system but rather to articulate points of resonance among them, particularly regarding embodiment, distributed agency, and human–nonhuman relationality.

3. Interpretive Spatial Readings

Selected architectural works and spatial situations are examined through interpretive analysis, focusing on how material, atmospheric, and environmental relations are enacted. This includes how bodies engage with surfaces, thresholds, and spatial conditions that foreground relational dynamics. Cases are approached as interpretive instances rather than representative samples, illustrating how animist relational perspectives can reveal alternative understandings of architectural experience.

4. Relational Mapping and Analytical Matrices

To support these readings, the research employs relational mapping, sketches, author-produced photographic documentation, and analytical matrices that trace interactions among bodies, materials, temporal processes, and environmental forces. These tools function not as technical evaluation instruments but as conceptual devices for visualizing distributed agency and reciprocal relations within spatial situations.

5. **Epistemological Framing**

Finally, the insights generated through these steps are synthesized into an epistemological reframing of architectural thought, positioning architecture not as a collection of discrete objects but as a relational field that can be understood as co-constituted by humans, nonhumans, and their environments. The methodology thus moves from theoretical grounding, through interpretive engagement, toward conceptual articulation, highlighting the relational and interactive character of spatial experience.

1.6 Thesis Structure

Chapter 2 explores animism as dialogical mode of engagement, tracing its historical evolution, contemporary reinterpretations, and ecological implications, while critically examining the objectifying tendencies of Western thought.

Chapter 3 connects animism to phenomenology, emphasizing embodied perception, situated spatiality, and enactive cognition as analytical tools for understanding spatial experience as relational and co-constituted.

Chapter 4 investigates posthuman thought, reframing the agency of matter and examining distributed networks of human and nonhuman actors within architectural contexts.

Chapter 5 presents multiperspectival explorations through interpretive vignettes and case studies, applying the methodological framework developed earlier to examine relational dynamics in spatial situations.

Chapter 6 reflects on the potential of animism-informed frameworks for future architectural practice, translating theoretical insights into design-oriented considerations. This chapter operates on two complementary levels: first, as an analytical lens for interpreting and reading relational spatial interactions; and second, as a design orientation that envisions architecture as a participatory and co-constituted field rather than a static, object-centered construct.

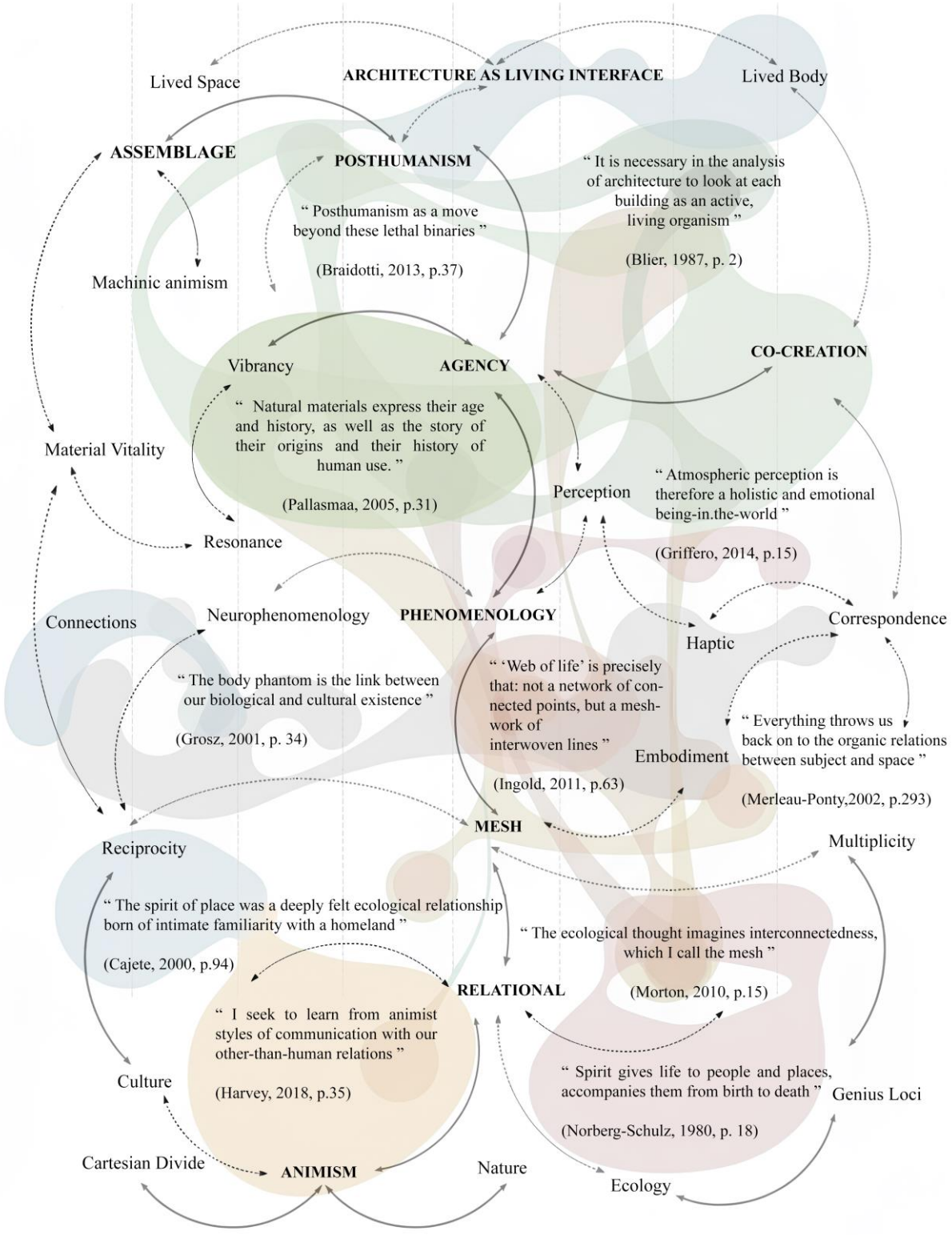


Figure 1. Conceptual Map of Interwoven, created by the author.

Chapter 2

Animism as a Relational Framework

> " *I once asked an old man: Are all the stones we see about us here alive? He reflected a long while and then replied, 'No! But some are.' This qualified answer made a lasting impression on me* "
>
> — A. Irving Hallowell, 1960

Animism:

noun | an·i·mism | ˈanəˌmizəm

This chapter examines animism primarily as a culturally situated mode of identification and relational engagement, as described ethnographically in various non-Western traditions.

It does not treat these descriptions as ontological claims asserting universally true metaphysical realities, nor does it assert their superiority over Western naturalism. Rather, they are approached strictly as analytical tools and ethnographic descriptions that illuminate continuities and discontinuities in the ways humans and nonhumans are related within specific cultural contexts. In doing so, this perspective helps challenge the rigid nature/culture dualism embedded in modernist thought.

Historical Background:

The term *animism* is derived from the Latin word *anima*, which signifies breath, life, or spirit, and from the Proto-Indo-European root *ane*, meaning "to breathe," combined with the suffix *-ism*.

Animism can be understood as a conceptual framework in which every entity, whether living or nonliving, including objects, spaces, and so forth, is interpreted as possessing a spiritual essence, consciousness, or relational capacity.

The notion of animism was coined by British anthropologist Edward B. Tylor in his book *Primitive Culture* (1871). Tylor adapted the term from Georg Ernst Stahl, who derived it from the Latin "anima" in 1720. In *Primitive Culture,* Tylor defined animism as " the doctrine of spiritual beings " (Tylor, 1871, p. 377), presenting it as the minimal definition of religion. According to Tylor's theory, religious ideas emerged from animistic beliefs: humans attributed spirits or life to inanimate objects, such as rivers, trees, and stones, which eventually gave rise to religious thought.

Over time, these animistic spirits and forces evolved into multiple gods or spirits, eventually leading to polytheistic systems. In Tylor's evolutionary model, European societies were seen as having progressed from animism to polytheism, then to monotheism, and finally to science, representing a linear model of social evolution that moved from primitive thought to civilization. In contrast, Indigenous societies[1]were considered to remain outside this cultural process and to adhere to beliefs centered on the spirits of nature.

Building on this, Scottish anthropologist James Frazer reconceptualized and expanded Tylor's theory of animism in his book *The Golden Bough* (1894). He explained that:

"Instead of regarding each tree as a living and conscious being, man now sees in it merely a lifeless, inert mass, tenanted for a longer or shorter time by a supernatural being who, as he can pass freely from tree to tree, thereby enjoys a certain right of possession or lordship over the trees, and, ceasing to be a tree-soul, becomes a forest god " (Frazer, 1894, p.66).

In summary, Tylor positioned animism as the foundation of religious thought, whereas Frazer approached animism from a broader perspective, viewing it as the interconnection of all things. Nevertheless, this evolutionary model has faced sharp critiques.

[1] The term İndigenous peoples refers to various native ethnic communities. (see: First Nations, Native Americans, Aborigines).

American philosopher David Abram provides a critical perspective on the assumptions of social evolutionism. In *The Spell of the Sensuous*, he emphasizes this issue as follows: "European civilization's neglect of the natural world and its needs has clearly been encouraged by a style of awareness that disparages sensorial reality, denigrating the visible and tangible order of things on behalf of some absolute source assumed to exist entirely beyond, or outside of, the bodily world" (Abram, 1996, p. 63).

The evolutionist aspect of nineteenth-century Western anthropologists focuses on an abstract and anthropocentric[2] understanding, rather than on the relational dynamics between humans and nature.

According to their point of view, nature is seen as passive, stable, and open to human influence, like a substance or background. Culture, however, is created by humans and is regarded as active, unstable, and layered upon nature. In other words, both Tylor and Frazer, influenced by Victorian evolutionism,[3]positioned humans as separate from and superior to nature. In this context, animism, as a relational engagement with the natural world, was frequently dismissed by nineteenth-century Western thinkers as primitive or backward.

[2] Anthropocentrism is a human-centered point of view.

[3] 19th-century theories posited a unilinear progression of societies from primitive to civilized forms.

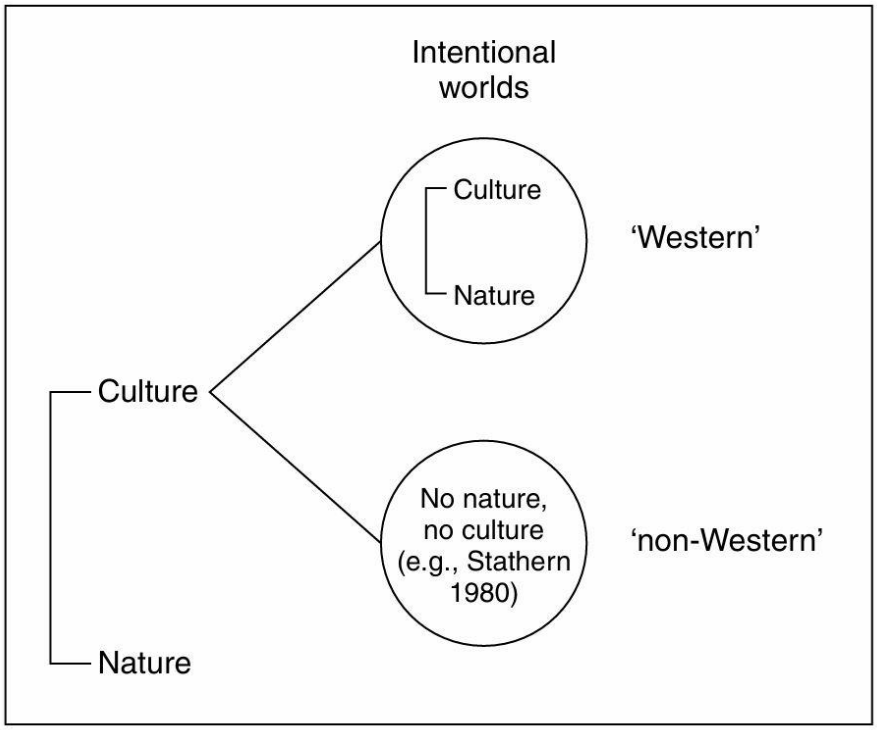


Figure 2. Diagram: Comparison of Western and non-Western ontologies, source: Ingold, 2000, p.42.

Towards a Contemporary Rethinking:

The shift from nineteenth-century animism interpretations to the mid-twentieth century and beyond, contemporary theorists began to question the rigid separation embodied in the nature and culture dichotomy in Western thought. As Tim Ingold (2000, p.41) points out, "Many anthropologists are well aware that the basic contrast between physical substance and conceptual form, of which the dichotomy between nature and culture is one expression, is deeply embedded within the tradition of Western thought."

This perspective emphasizes the need to re-evaluate conventional distinctions between nature and culture. Rather than treating nature as a separate domain of objects and culture as a realm of meanings, Ingold proposes a relational perspective rooted in the concept of dwelling: humans do not merely act upon a passive world but live with and within it through ongoing, mutual engagement.

Viewed through this lens, the human–nature relationship to be understood not as a hierarchical opposition but as a dynamic meshwork of relations. This relational understanding recurs across diverse cultural contexts and challenges the modernist assumptions underlying earlier anthropological views of animism.

In this context, Claude Lévi-Strauss emerges as a key figure among mid-twentieth-century anthropologists and sociologists. In *Totemism* (1962) and his later *The Savage Mind* (1966), he does not seek to restore or rehabilitate animism or totemism as superior or more authentic modes of thought. Instead, he uses totemic systems as empirical examples to demonstrate how classification works in societies traditionally labeled "primitive," revealing the underlying structural logic of the human mind. For Lévi-Strauss, totemism is neither a primitive delusion nor an evolutionary stage, but a sophisticated symbolic system that transforms natural differences into cultural meanings through analogy and classification.

As Lévi-Strauss explains with his well-known diagram (Lévi-Strauss, 1962, p. 17):

	1	2	3	4
NATURE				
	Category group	Category person	Particular person	Particular group
CULTURE				

Through his structural analysis of the nature–culture dichotomy, Lévi-Strauss examines how societies transform natural differences into cultural categories. To explain this process, he establishes two main axes: nature–culture and group–individual, which together form a symbolic map of societal classification. He further suggests a third axis to represent the types of relations between the extremes of the first two axes, such as emblematic connections, relations of identity, descent, or interest, both direct and indirect (Lévi-Strauss, 1962, p. 24).

This framework demonstrates that totemic classifications operate through a process of bricolage[4], whereby humans rearrange existing natural elements (animals, plants) to produce structured cultural meanings and social distinctions. Importantly, Lévi-Strauss does not seek to elevate or preserve animism; rather, he treats animist and totemic classifications as concrete examples of structural logic at work in non-Western societies.

Building on this structural foundation, Lévi-Strauss's former student Philippe Descola took the critique further, developing an ontological pluralism that explicitly transcends the Western nature/culture dichotomy. His approach compares how different societies perceive and organize their relations with the environment.

According to Descola, his initial definition of animism and Lévi-Strauss's characterization of totemic classifications provide significant inputs; however, they are limited as starting points for completely capturing the process of identification between humans and nonhumans in diverse societies. To address this, Descola proposes four analytical modes of identification: animism, totemism, analogism, and naturalism, as analytical schemas for understanding how different cultures infer continuities and discontinuities in interiority (subjectivity, intentions) and physicality between humans and non-humans. These modes do not describe how the world objectively is in a universal sense; rather, they serve as tools to compare how societies organize their relations with the environment and structure their ontologies.

This approach directly challenges the Western dualism previously criticized by showing how, in animist modes (particularly evident in some Indigenous contexts), continuity of interiority across humans and non-humans fosters relational engagement rather than separation.

Descola further explores such relational ontologies in Amazonian societies in his book *Beyond Nature and Culture* (2013). He indicates: "Amazonian societies ascribe to plants and to animals a spiritual principle of their own and consider it possible to maintain personal relations with those entities, relations of friendship, hostility, seduction, matrimonial alliances, or those involving reciprocal services" (Descola, 2013, p.123).

[4] The term bricolage (French, meaning 'tinkering') was introduced into academic theory by Claude Lévi-Strauss in The Savage Mind (1966). It refers to the resourceful creation of new structures, myths, or ideas by rearranging and reusing a limited stock of existing elements.

This illustrates a culturally specific way of experiencing non-humans as persons within ongoing reciprocal ties, rather than a universal claim about the inherent properties of matter.

Eduardo Viveiros de Castro further radicalizes this perspective through his concept of perspectivism, particularly in his studies of Amazonian cosmologies, as in *The Relative Native* (2015). In these cosmologies, humans and non-humans share a fundamental subjectivity (soul/interiority), but possess radically different bodies (natures/perspectives). Crucially, this is a feature of specific indigenous relational reasoning, not a universal ontological truth.

This insight leads to the concept of multinaturalism, in which beings inhabit different worlds or bodily viewpoints, even while sharing similar intentionalities. Animism, in this context, is not simply the attribution of a soul to nonhumans; rather, it is the recognition of shared subjectivity differentiated by bodily perspective. Again, this reflects culturally specific relational reasoning rather than a universal property of matter. Such a perspective positions animism as a complex system emphasizing continuity, interdependence, and relational engagement, while challenging historical framings of these beliefs as primitive.

This theoretical trajectory from Ingold's critique of embedded dualisms, through Lévi-Strauss's symbolic mediation, to the ontological pluralism of Descola and the perspectivism of Viveiros de Castro provides an essential framework for the contemporary rethinking of non-human engagement. By showing the intellectual complexity of alternative relational ontologies in particular cultural contexts, these theorists challenge the Western conception of nature as a passive domain, opening the way to understand nonhumans not as inert objects but as active subjects and relational partners within specific analytical and cultural frameworks.

By way of conclusion,

As an evocative illustration of how some contemporary anthropologists describe relational worlds in certain Indigenous cultures (without asserting a literal consciousness in matter), Harris and Crellin note: " This is a world in which stones move, live, and have opinions. Here, different stones play active roles in their own histories and are not merely brute dead matter: people and stones, along with many other materials, write history together." (Harris & Crellin, 2019, p. 70)

Taken together, these contemporary anthropological perspectives from Ingold's dwelling perspective and Lévi-Strauss's structural mediation to Descola's modes of identification and Viveiros de Castro's perspectivism reposition animism far beyond its nineteenth-century dismissal as a primitive belief. Rather than a naive attribution of life to matter, animism emerges as a sophisticated conceptual lens for understanding reciprocity, relationality, and interdependence, providing critical insights for addressing contemporary environmental and ecological challenges.

2.1 Beyond Belief: Animism as a lens for ecology

> "*Animists are people who recognize that the world is full of persons, only some of whom are human, and life is always lived in relationship with others* "
>
> — Graham Harvey, 2006

Beyond being merely a belief system, animism can be understood as a relational mode of engaging with other-than-human beings in ongoing, reciprocal relationships.

This relational approach recurs as a pattern across various cultures, periods, and regions, emerging independently in response to each society's unique ecological, historical, and social contexts, rather than representing a single universal worldview. This understanding aligns with contemporary anthropological perspectives on "new animism," which reconceptualize animism not as a primitive belief in spirits but as a relational epistemology that emphasizes respectful relations between human and other-than-human persons (Bird-David 1999, Harvey 2006).

For instance, among the Ojibwa people of North America, every entity in nature, including trees, rivers, and animals, is interpreted as carrying a living essence. Within this conceptual meshwork, humans are one participant in this interconnected network of multiple beings, engaging with nonhuman beings as persons endowed with agency. Across the Americas, many Native peoples recognized the Earth as a living organism and developed sophisticated technologies to coexist in harmony with it. As Cajete indicates: " In the places they lived and with their awareness of the Earth as a living organism, Native people developed sophisticated technologies to make their lives easier and more efficient. In the Americas, people learned to use water, established transportation systems, used minerals they mined from the Earth, and created the art needed to express their intimate relationships with the Earth's products they used" (2000, p.188).

A related but distinct expression appears in sacred landscape traditions. Stonehenge, built thousands of years ago in Europe, can be read as part of a sacred environmental order in which the very stones are perceived to possess spiritual presence. This interpretive lens is also evident in Japan, where Mount Fuji is venerated as a divine being; Shintoist and Buddhist rituals continue the reverence for the mountain's spirit. Similarly, the personification of rivers as goddesses in Hinduism exemplifies an ancient understanding that water possesses purifying powers, a perspective that continues to persist today.

Another expression emerges in shamanic cosmologies. In Central Asia, Turkic and Mongolic shamans approached the sky, mountains, rivers, and animals as sacred beings and communicated with these spirits through shamanic rituals. The Dogon and San peoples of Africa also positioned nature as a living and relational entity within their cosmological structures through rituals they established with the sky, rivers, and earth.

Among Australian Aboriginal peoples, sacred sites like Uluru (Ayers Rock) are seen as living beings inhabited by ancestral spirits. Humans interact with the landscape through ceremonies and storytelling, maintaining respectful and ongoing relationships with the land and its entities. In the Amazon rainforest, indigenous groups such as the Yanomami treat animals, plants, and rivers as persons with whom reciprocal relations are essential; Shamans communicate with these beings to ensure balance in hunting and gathering practices.

These examples, arising from diverse cultures and geographies, demonstrate recurring patterns of engagement rather than a uniform doctrine. In each case, the environment is not perceived

as an inert object but is approached as active and deserving of communication. This pattern of humans relating to the world as filled with active beings emerges independently across various contexts, highlighting animism as one of the most enduring and adaptable ways that humans have understood and navigated their ties to the more-than-human world. This analytical perspective continues to influence contemporary legal and environmental thought: " In 2017, the Whanganui River in Aotearoa New Zealand was recognized as a 'person' for legal purposes. The river was afforded rights and protections such that a multi-million dollar fund was established to enhance the health and well-being of the Whanganui. Rivers, like humans, have multiple relationships, e.g., with fish, plants, local humans, tourists, engineers, soils, and so on. Indeed, rivers are the sum of all those who compose them: water, fish, plants, fishers, bacteria, banks, and all. These relations and constitutions also help us see human personhood more clearly. Like rivers, we are multiple beings both in the sense that "our" bodies are made of many nonhuman cells and in the sense that "our" bodies work with others (particularly hosts of necessary bacteria in our guts) to share nutrition''(Harvey, 2018, p.47).

At its core, animism as reconceptualized in contemporary anthropology frames the world as a meshwork of relations rather than a hierarchy of objects (Ingold, 2011). It emphasizes interdependence and relational accountability, providing a robust epistemological ground for rethinking human–nonhuman engagements.

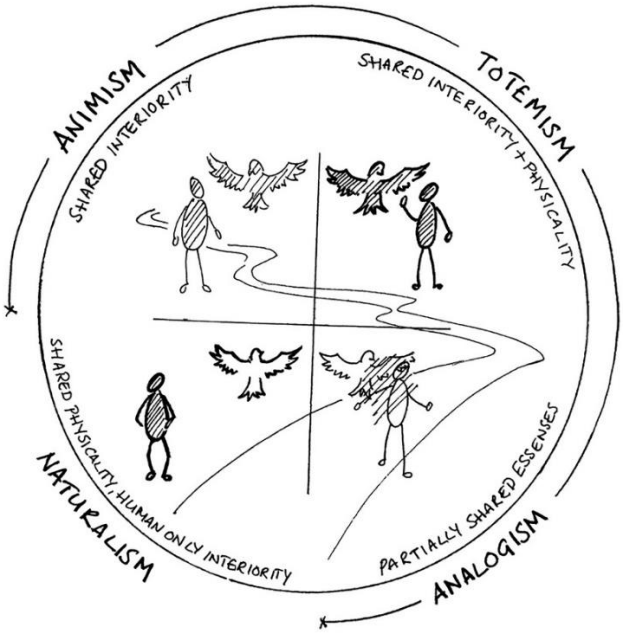


Figure 3. Diagram: Descola's Ontological Categories, by Lisa Meaney, 2022, source: © Wild Pear CIC.

Philippe Descola's concept of ontological pluralism (2013) provides a useful framework for interpreting these relational patterns by defining animism as one of four modes of identification, alongside naturalism, totemism, and analogism.

In the animist mode, continuity of interiority (subjectivity, intentions, and agency) is attributed across humans and nonhumans, while physicality is understood as variable. As a result, entities such as water, trees, animals, rocks, and landscapes are engaged with as persons endowed with intentions and agentive capacities within specific cultural frameworks.

Importantly, animism is not a universal statement about reality, but an account of culturally situated ways of organizing relations and constituting what counts as a world. Descola does not claim to describe how the world objectively is. Instead, it proposes an analytical comprehensive lens for understanding how different societies establish continuities and discontinuities between humans and non-humans through various modes of identification and relation.

Eduardo Viveiros de Castro's concept of perspectivism (2015) complements this approach by emphasizing that certain Indigenous cosmologies, often described as Amerindian multinaturalism, operate through multiple, relationally grounded viewpoints. In this context, both humans and non-humans are understood as sharing similar forms of interiority, despite differences in their physical embodiments. However, this perspective should not be interpreted as a metaphysical claim about how reality is. Instead, it serves as an ethnographic and conceptual description of how particular collectives understand, experience, and organize their relationships with the various beings that inhabit their worlds.

This emphasis on relationality finds a parallel in Bruno Latour's Actor-Network Theory (2005), which proposes a methodological approach for describing networks in which human and nonhuman entities are treated symmetrically as actants. In Actor-Network Theory (ANT), no entity exists in isolation; meaning emerges through the relationships established between human and non-human actors, such as objects, technologies, animals, ideas, and environmental elements, which influence the network.

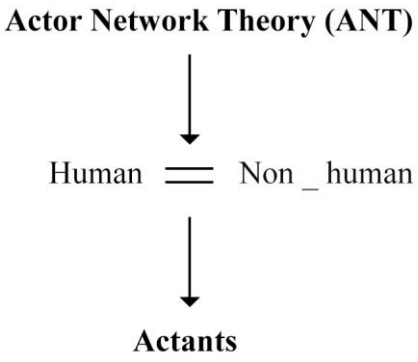


Figure 4. Diagram: Bruno Latour's Actor-Network Theory, created by the author.

According to generalized symmetry, distinctions between nature and culture are understood as artificial constructs produced within networks, rather than ontological truths. Therefore, ANT does not assert that non-humans truly possess independent agency in the same way humans do, but insists on describing socio-material relations symmetrically to trace how associations form and stabilize.

In this sense, Latour's approach provides a complementary methodological ground for thinking across architecture and ecology, viewing the material world as participating in networks of relations, not through attributing inherent agency to non-humans in a metaphysical sense, but by analyzing collaborative productions among diverse actants.

Within ecological thought, this perspective resonates with a shift toward mutual coexistence, where humans are understood as participants within, rather than dominators of, biotic communities. This orientation recalls certain Indigenous cosmologies in which land is engaged with as kin rather than as a commodity. Building on this, contemporary philosopher Timothy Morton develops a renewed form of ecological thinking with animist implications. As he explains:

"All life forms are the mesh, and so are all dead ones, as are their habitats, which are also made up of living and nonliving beings" (Morton, 2010, p.29).

According to Morton, what is commonly referred to as “Nature” is an artificial construct of modern thought (Morton, 2010). As humans have come to perceive themselves as separate from and superior to nature, they have idealized it as a distant, pure, and untouched realm. This separation, however, inhibits ecological awareness by positioning humans outside the very totality to which they belong. Instead, Morton argues that existence is fundamentally intertwined, interdependent, and continuously entangled. As he states, “The ecological thought insists that we're deeply connected even when we say we're not” (Morton, 2010, p. 8). In this sense, no being exists in isolation; rather, all entities emerge through relations with others. Ecological thinking, therefore, begins from this premise of radical interconnectedness.

This theoretical insight finds empirical support from Eduardo Kohn’s anthropological work. In *How Forests Think: Toward an Anthropology Beyond the Human* (2013), Kohn develops a semiotic approach grounded in ethnographic fieldwork with the Runa of Ecuador’s Upper Amazon. Importantly, this is not presented as a universal claim about nonhuman cognition, but as an account of how particular Amazonian cosmologies organize meaning and relationality beyond the human.

In a comparable vein, Bird-David and Naveh (2008) describe the animist perception of trees as follows: “ Every [forest] tree is a living being, a tree has a soul. Like people have blood, trees have water ”(p. 67). Such ethnographic descriptions illustrate how, within specific cultural contexts, nonhuman entities are engaged as participants in processes of meaning-making. From this perspective, animism can be understood less as a belief system than as a relational semiotics of life, in which beings are mutually constituted through their interactions. As Kohn (2013) indicates, “Signs don't just stand for things and relations; they are the very tissue through which the world becomes”(p. 9).

By way of conclusion,

While these thinkers share a common critique of the nature/culture dichotomy inherited from Western modernism, their approaches diverge in important ways. Lévi-Strauss's structuralism interprets totemism and classification as expressions of a universal logic of the human mind, without favoring relational ontologies.

Ingold emphasizes on dwelling and lived engagement, foregrounding relational processes over abstract dualisms. Descola develops an ontological pluralism with four modes: animism, totemism, analogism, and naturalism, treating them as analytical schemas rather than evolutionary stages or endorsements of any single ontology. Viveiros de Castro extends this framework through perspectivism and multinaturalism, describing Amazonian cosmologies in which shared interiority coexists with bodily difference, understood as a culturally specific mode of reasoning. Latour's Actor-Network Theory, in turn, introduces a methodological symmetry that traces associations between human and nonhuman actants without committing to claims about intrinsic agency.

Taken together, these approaches, structural, phenomenological, pluralist, perspectival, and symmetrical challenge earlier evolutionist dismissals of animism. Rather than converging into a single unified ontology, they offer complementary frameworks for rethinking relations between humans and nonhumans.

In this context, animism can be reconsidered not merely as an ancient belief system, but as a relational framework for rethinking the human–nature dynamic. Instead of reproducing a hierarchy of objects characteristic of Western modernity, this perspective foregrounds a meshwork of interconnected beings understood through their relations. Such a lens appears in various Indigenous cosmologies, where land is engaged with as kin, and finds contemporary expression in developments such as the legal recognition of nonhuman entities, exemplified by the personhood granted to the Whanganui River. By challenging the nature–culture divide, animism, as reconceptualized in contemporary anthropology, proposes a critical conceptual framework for engaging with current ecological thought.

2.2 Animism and Objectification

> " *In the Western mind-set, getting from at point A to point B is a linear process, and in the Indigenous mind-set, arrival at point B occurs through fields of relationship and establishment of a sense of meaning, a sense of territory, a sense of breadth of the context* "
>
> — Gregory Cajete, 2000

Animism can be understood as an interpretive framework that approaches the world as a field of continuous reciprocity involving humans, animals, plants, material elements, and spiritual beings.

Within this perspective, existence is constituted through interdependent engagements that are culturally and interpretively situated. Accordingly, rivers can be described as "listening," winds as "teaching," and stones as "moving," thereby positioning space as a participatory partner rather than an inert backdrop. These expressions do not imply literal consciousness in matter; rather, they articulate relational and dialogical modes of engaging with the more-than-human world.

The relational and holistic character often associated with animism has been largely undermined by the objectifying tendencies of Western thought, which have produced dichotomies separating humans from their living contexts and fragmenting the world into discrete categories. At the core of this dissociation lies the Cartesian divide, or dualism, introduced by the French philosopher René Descartes in the seventeenth century.

Descartes proposed a fundamental distinction between *res cogitans* (the thinking mind or subject) and *res extensa* (the extended body or material world). According to him, mind and body are fundamentally different kinds: the mind is a thinking entity, while the body is a spatial

entity. Human consciousness is thus positioned as the primary source of meaning, while matter is reduced to an inert and passive background.

This distinction is the basis of his philosophy, known as Cartesian dualism. In *Meditations on First Philosophy*, Descartes famously articulates the idea of "Cogito, ergo sum," which means "I think, therefore I am" (Descartes, 2008, p. xii). This discourse places humans at the center of existence, but also excludes everything that does not think from the category of being. As a result, in the Cartesian framework, the activity of matter was conceptually diminished; and the world was reconfigured as a manageable, objectifiable domain, understood as lacking interiority or intrinsic vitality.

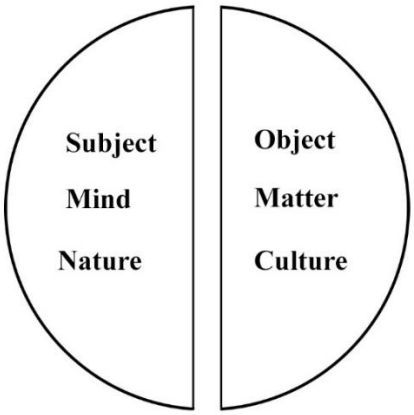


Figure 5. Diagram: The Distinction Between Things According to Western Rationalism, created by the author.

In particular, the establishment of dualisms such as nature/culture, mind/body, and subject/object, grounded in Cartesian thought, has contributed to disrupting the relational continuity characteristic of many animist worldviews. This shift has enabled the environment to be framed as a set of objects open to control, rather than as a network of relational partners. The tension between animism and objectification is therefore not merely philosophical, but reflects a deeper transformation in how the world is perceived and organized.

This transformation was further intensified during colonial processes, in which animist ontologies were frequently discredited and labeled as primitive, superstitious, or irrational.

As Eduardo Viveiros de Castro suggests, it becomes necessary to rethink the notion of an "indigenous cogito" as a conceptual principle within animistic frameworks.

In contrast to the egocentric formulation "I think, therefore I am," which isolates the human subject, he suggests an alternative articulation: "It exists, therefore it thinks" (Eduardo Viveiros de Castro, 2015, p. 187). This reframing underlines a relational subjectivity that emerges not as an exclusively human attribute but as a distributed across beings, animals, plants, spirits, and landscapes within perspectival relations.

In this view, existence gives rise to relationally distributed forms of subjectivity, challenging frameworks that reduce the nonhuman to a passive background. Rather than being inert, nonhuman entities are understood, within specific cultural and analytical contexts, as participants in processes of meaning-making and experience.

Bruno Latour's critique of modernity further supports this perspective. According to Bruno Latour, the modernist project attempted to "purify" these areas to avoid disturbing mixtures between dualisms; yet this purification remained incomplete, and modernity has tended to overlook intermediary relations (Latour, 1993).

Latour's well-known assertion, "*We Have Never Been Modern*" (Latour, 1993), suggests that a pure separation has never been realized; instead, we inhabit a hybrid reality where nature and culture remain intertwined. This perspective is further extended by Graham Harvey, who suggests that "if we have not been modern, perhaps We Have Always Been Animists" (Harvey, 2013, p. 11). Such interpretations encourage a re-examination of objectification not merely as a historical concept but as an ideological force continuing to influence contemporary understandings. Together, these perspectives invite a reconsideration of objectification not only as a historical development but as an ongoing epistemological condition.

From an environmental perspective, animist approaches offer alternative ways of conceptualizing ties to the more-than-human world. Within certain Indigenous knowledge systems, rivers, forests, and animals are approached as participatory entities rather than inert resources. Such perspectives, while culturally specific, provide methodological insights for addressing ecological crises linked to extractive and objectifying modes of thought. For instance, in the Amazon, Indigenous communities interpret the rainforest as a network of interactions, with trees described as communicating through their roots.

This perspective reflects sophisticated ways of understanding collective ecological processes. This mode of interpretation stands in contrast to patterns of deforestation and cultural displacement, emphasizing the value of sustainable stewardship.

Latour's observation that we have "never been modern" (1993) resonates here: much of what is framed as modern progress has overlooked these interconnections, thereby exacerbating issues such as climate change. Similarly, Harvey's suggestion that "we have always been animists" indicates that these relational modes of engagement are not novel; rather, they offer a methodological starting point for interpreting and addressing contemporary ecological challenges. This shift can be considered a rediscovery of associative ways of seeing that can provide a robust epistemological ground for contemporary ecological thought.

Nevertheless, engaging with animist perspectives raises important challenges. Western scientific frameworks, grounded in objectification, have enabled significant technological and medical advancements that cannot be dismissed. Donna Haraway offers a useful orientation for thinking relationally about humans and non-humans in the contemporary world: "Staying with the trouble does not require such a relationship to times called the future. In fact, staying with the trouble requires learning to be truly present, not as a vanishing pivot between awful or edenic pasts and apocalyptic or salvific futures, but as mortal critters entwined in myriad unfinished configurations of places, times, matters, meanings" (Haraway, 2016, p. 1). Rather than choosing between objectification and animism, a more productive path may involve hybrid approaches that integrate their strengths. Objectification affords precision and control, while animism introduces relational depth and vitality, enabling non-human entities to be understood and engaged with as relational participants.

Contemporary examples, such as New Zealand's legal recognition of rivers as persons informed by Māori ontologies, illustrate how such integration can generate protections against exploitation and environmental threats.

The interplay between animism and objectification thus represents not merely a historical debate but an ongoing analytical opportunity for reconsidering our engagement with the world. Reframing subjectivity from "I think, therefore I am" toward "It exists, therefore it thinks" opens possibilities for understanding existence as more relationally distributed, in which humans are not the sole locus of significance.

Graham Harvey's proposition that we may always have been animists in certain respects suggests a continuity that can inform present efforts, particularly as the historical legacies of colonial separation are critically examined in contemporary scholarship.

Rather than asserting the metaphysical truth of animist perspectives, this research approaches animism as a conceptual lens that denaturalizes the objectifying gaze of modernism and opens alternative ways of thinking about architecture as relational and co-constituted.

Within architectural discourse, this critique holds particular relevance. An animist-informed perspective invites a reconsideration of buildings not as static, isolated objects, but as dynamic participants within broader environmental and relational networks.

When relational unity is replaced by materialist objectivism, architecture is no longer approached primarily as a lived-in environment but rather as an object that is human-centered, designed by humans, and produced for human use. Space is approached more as an image to be exhibited and consumed; it becomes a "thing" designed upon, a product, a functional tool. Historically, Western architecture has been shaped by dualistic ontologies inherited from Cartesian and Enlightenment thought: structure/nature, interior/exterior, form/function, human/environment. This separation is reflected in the design process itself. As Juhani Pallasmaa indicates: "The processes of planning have favoured the idealising and disembodied Cartesian eye of control and detachment; city plans are highly idealised and schematised" (Pallasmaa, 2005, p.29). Architecture and urban design have often been conceptualized as objects largely disconnected from nature and human experience, reflecting interpretations such as Le Corbusier's concept of the "*machine à habiter*" (machine for living).

At this point, when applied to architecture, animist perspectives open a different horizon. Animism provides a conceptual lens for this rethinking, positioning matter as relationally active in relational terms, space as relationally constituted, and existence as a co-constituted process in interpretive terms. This orientation encourages viewing architecture as emerging not solely for humans but in partnership with the broader world of beings as understood within relational frameworks. While an objectifying worldview tends to reduce architecture to a closed design object, a relational animist framework reimagines it as interpreted as relationally entangled with its environment.

Conceiving space as a field of encounter co-created through bodies, perceptions, affects, atmospheres, and material agencies aligns with developments in phenomenology, material agency, and posthumanist architectural theory. In this regard, architecture becomes a multi-subjective, multi-actor domain in which, within animist-informed or relational frameworks, material and environmental elements are understood as relational participants within negotiated networks**;** buildings are thus interpreted as emerging through relational processes involving wind, earth, water, animals, and other entities**,** rather than as isolated objects set against a passive backdrop within animist-informed interpretive lenses.

These considerations point toward the possibility of a hybrid architectural framework: one that draws on the analytical precision and technological capabilities of Western design traditions while deliberately incorporating the relational qualities and interpretive insights emphasized in animist perspectives.

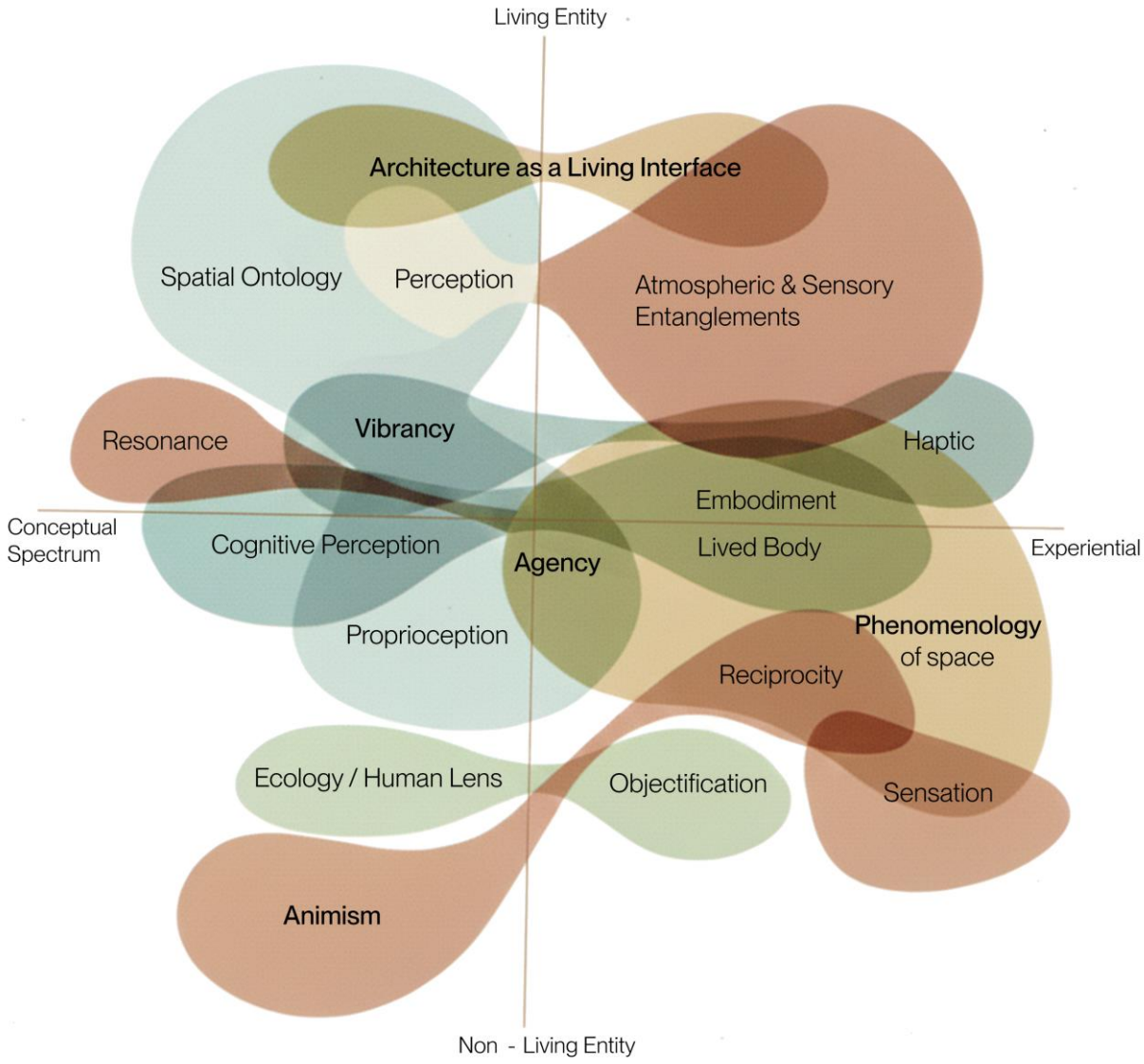


Figure 6. Conceptual Expression, created by the author.

Chapter 3

From Animist Relations to Phenomenology

"*Architecture is deeply engaged in the metaphysical questions of the self and the world, interiority and exteriority, time and duration, life and death* "

— Juhani Pallasmaa, 2005

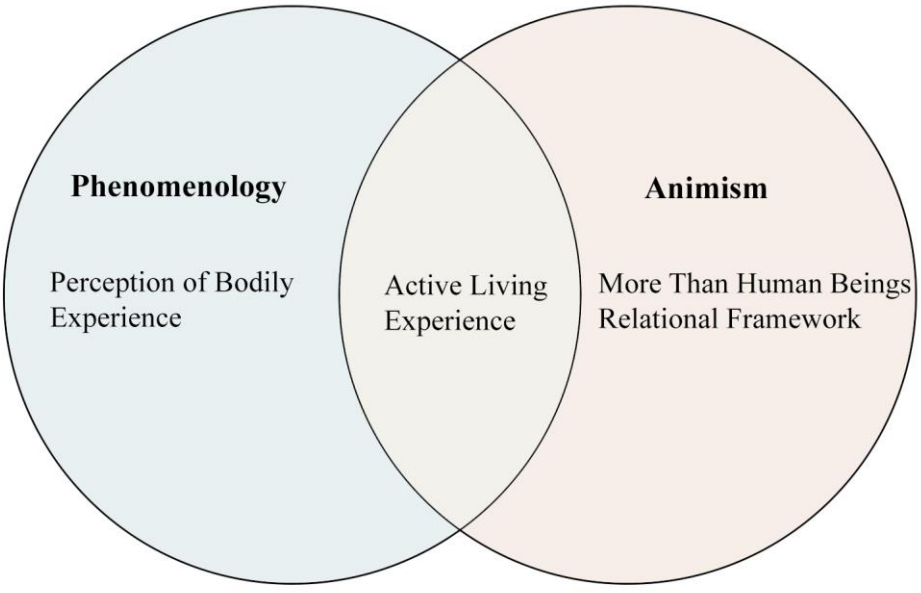


Figure 7. Diagram: The intersection between Animism and Phenomenology, created by the author.

Building on critiques of Cartesian dualism and its objectifying logic, this transitional framework opens space for a hybrid approach to architectural thinking that mediates animist relationality.

Phenomenology provides a complementary lens for understanding relational becoming through embodied experience. While animism interprets human and nonhuman interactions as interconnected, phenomenology emphasizes our moment-to-moment, lived experience, showing that space is not merely a container but is experienced and shaped through bodily engagement.

The aim in this chapter is to explain how space can be interpreted as co-constituted through the interaction between the body and the world. Essentially, both animism and phenomenology transcend the barriers of the Cartesian subject-object dichotomy; connecting them conceptually provides an effective framework for a non-dualistic understanding, positing a relational world of becoming. The bridge between animism and phenomenology finds its most tangible basis in the phenomenology of embodiment, where perception and existence are grounded in the lived body.

In this sense, animism is not merely the attribution of a soul to non-humans; rather, in Castro's perspectivism, it can be understood as recognizing shared subjectivity that varies across bodily perspectives. Different bodily forms (human, animal, or soul) express related modes of engagement. This aligns with Merleau-Ponty's concept of the "*bodily schema*," demonstrating that space is not merely a passive background but a "field of being" that is constantly reconfigured through bodily interactions.

This convergence finds vivid expression in architectural practice, where animist interpretive sensibilities and the focus on embodied experience of phenomenology unite in the aspects of design and inhabitation. Consider, for instance, the tactile threshold of entry: it is here, at the boundary between interior and exterior, that the body's gesture meets the building's response, enacting a phenomenology of touch that echoes animist ideas of kinship. Juhani Pallasmaa captures this poignantly in his assertion that " The door pull is the handshake of a building, which can be inviting and courteous, or forbidding and aggressive" (Pallasmaa, 2005, p. 61). This simple metaphor transforms the door handle from a passive object into a site of mutual recognition, a gestural invitation where human hand and architectural form share interaction.

When we touch a material of a building, such as wood grain or cold metal, it is a two-way interaction, sort of a "handshake." The material is not passive; it reaches out to us as much as we grasp it. The form of the design is influenced by the expected shape of our palm, and simultaneously, our hand adjusts itself according to the contours of the material. From an

animist interpretive viewpoint, this is a literal interaction, not just a metaphor. The door pull is a non-human actor that holds the memory of countless hands, the weathering effects of the environment, and the minerals from which it was made. In terms of phenomenology, this interaction is felt through the body's immediate, instinctive awareness.

This mutual, gestural encounter at the threshold evokes Martin Heidegger's famous example of the hammer in his analysis of equipment in *Being and Time* (1927). Heidegger explains how a hammer functions seamlessly during the act of hammering; it becomes an extension of the user's body and is perceived as "ready-to-hand" (*zuhanden*). In this state, the user does not focus on the hammer as a separate object but instead sees through it to the work being done. It is only when the hammer breaks or becomes difficult to use that it is recognized as a distinct object, termed "present-at-hand" (*vorhanden*). This shift reveals that meaning arises through relational interactions rather than detached observations.

Similarly, the door pull or handle functions as ready-to-hand equipment in everyday inhabitation, its form shaped by anticipated human grasp, yet withdrawing from explicit awareness during smooth entry. Yet, in the phenomenological moment of touch, when the palm registers the grain of wood, the chill of metal, or the subtle resistance of the latch, the handle becomes more than an object; it reveals itself as an active participant in our interaction. It momentarily announces itself, not as inert matter, but as a participant in a reciprocal exchange. Phenomenologically, it discloses the embodied, pre-reflective way we dwell in the world.

The slight resistance of the latch, the movement of the hinge, or the sound of the floor beneath us, all these details invite a sensory reaction.

Claims of Pallasmaa, by emphasizing our physical engagement with architecture, move us toward a philosophy that rejects sharp divisions such as subject/object. This approach respects the world's vibrant materials and frames precise design as a subtle choreography between human intention and material agency.

Consequently, this conceptual intersection of animism and phenomenology treats space neither as a mere product of human consciousness nor as a passive physical shell; rather, it enables us to conceive of it as a vibrant field of relationality, constantly reconstituted between bodies, matter, and perception. In this context, architecture becomes the scene of encounters between the human and the nonhuman, where space is formed, transformed, and acquires meaning

through experience. Animist perspectives make visible the activity of matter and form; phenomenology shows how this activity is felt bodily. Architectural experience thus emerges not merely as visual perception but as a multi-sensory field of existence involving touch, movement, resistance, sound, and time. This bridge forms the theoretical basis for rethinking architecture not simply as a designed object but as a "state of becoming" constantly negotiated between humans, non-humans, and the world.

This chapter does not claim that architecture is ontologically alive, but that animism and phenomenology together help explain: *Why is architectural space experienced as relational, responsive, and alive-like?* Through this combined interpretive lens, architecture can be understood not simply as a designed object, but as a state of becoming, continuously negotiated between embodied subjects and the material world. This theoretical bridge provides the foundation for the chapters that follow, in which the implications of embodied and relational spatial experience will be examined across different scales.

3.1 Embodied Perception and the Lived Body

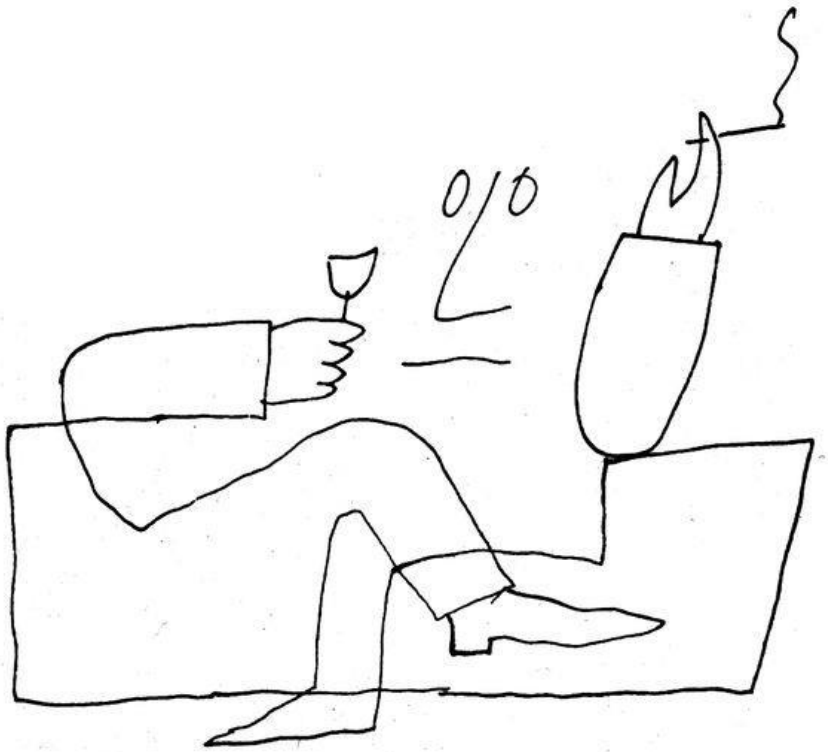


Figure 8. Drawing from The Passport, Saul Steinberg, 1954.

Situated in the gap within the divide between objects and subjects, animism offers an interpretive perspective that resists the rigid divisions of Cartesian thought and invites a rethinking of spatiality. Rather than simplifying the world and architectural perspective to a basic x-y-z coordinate system, this perspective reveals the multilayered relationships between entities. Viewed through an animist lens, space not as a collection of measurable planes but as a field of experience intertwined with reciprocity, interaction, and vitality. From this viewpoint, space is understood as co-constituted with the subject, moving beyond purely human-centered thinking to account for the dynamic interplay of material and affective flows.

This perspective requires us to understand the spatial experience not merely as a visual form or functional spatial organization, but as a bodily, emotional, and existential interaction. Building on this interpretive opening, phenomenology serves as a core theoretical framework that connects animism to an experiential understanding of architecture. Phenomenology emphasizes the importance of experiencing the world directly through the body rather than relying merely on abstract representations.

In Steinberg's Self-Portrait (1954), the figure holding a wine glass and a cigarette gradually merges with the very sofa on which he sits. Rather than depicting a detached body observing a passive environment, the drawing reveals a reciprocal entanglement in which the contours of the body extend into the furniture, and the furniture, in turn, shapes the posture, atmosphere, and presence of the sitter. This subtle yet decisive fusion illustrates that perception is not executed through a distant mental command but emerges from the body's continuous and pre-reflective engagement with its surroundings. In an ordinary moment of daily life, when we reach for a cigarette on a cluttered table, our fingers instinctively adapt to its shape, demonstrating that the perceptual activity of the subject is not merely a mind command. This natural and effortless gesture constitutes a silent yet decisive expression of the body's primacy in perception. It creates a shared field of experience between hand and object. Just as Steinberg's figure and the sofa form an expanded perceptual field in which the boundaries between subject and object dissolve, thus demonstrating the primacy of embodied experience in the constitution of space.

This very sample illustrates the core of the revolutionary phenomenological framework that Maurice Merleau-Ponty develops in *Phenomenology of Perception* (1945). Merleau-Ponty, a French philosopher, bridged the phenomenological tradition of Edmund Husserl with existential insights from Jean-Paul Sartre and Martin Heidegger. Both Heidegger and Sartre provide existential perspectives that frame human existence not as an abstract, disembodied consciousness but as a being already situated in the world. Heidegger emphasizes the notion of being-in-the-world (*In-der-Welt-sein*), highlighting the inseparability of existence and its worldly context. Sartre, on the other hand, focuses on consciousness, freedom, and the embodied encounter with facticity. Merleau-Ponty engages with these insights critically, integrating them into his own account of the lived body and perceptual experience. In doing so, he challenges the Cartesian inheritance of mind–body dualism. He develops an original

phenomenology that places lived, embodied experience at the core of the subject's relation to the world.

According to Maurice Merleau-Ponty, the body is not merely a tool for passively observing the external world; rather, it is the fundamental condition for our existence and perception of things in the world. The very way we exist in it and perceive things. This approach is completely opposed to traditional philosophy stemming from Descartes onward. He sees man as a disembodied "res cogitans" (thinking thing) that observes the world only through mental representations. For Merleau-Ponty, however, the body is not an appendage to the mind, but consciousness itself. From this perspective, we do not simply observe the world from afar as a mind; we experience the world with our bodies. He articulates the body as the primordial site of meaning: not a container for mind, instead, a perceptual flesh intertwined with the world. Merleau-Ponty (1945/2002) indicates that "My body is the fabric into which all objects are woven, and it is, at least in relation to the perceived world, the general instrument of my comprehension. It is my body which gives significance not only to the natural object, but also to cultural objects like words"(p. 273). This perspective emphasizes that our bodily engagement with the world is not secondary but constitutive of our experience. In other words, we don't just use our bodies to move around; we use them to think. We understand the world because we interact with it physically, and in this direction, our body is not merely a tool. It is how we experience and make sense of both the natural and cultural environment.

This bodily comprehension is particularly rooted in the tactile dimension, as our body establishes its most primordial contact with the world through the skin. According to anthropologist Ashley Montagu's view based on medical evidence, " [The skin] is the oldest and the most sensitive of our organs, our first medium of communication, and our most efficient protector ... Even the transparent cornea of the eye is overlain by a layer of modified skin .. Touch is the parent of our eyes, ears, nose, and mouth. It is the sense which became differentiated into the others, a fact that seems to be recognised in the age-old evaluation of touch as "the mother of the senses" " (Montagu, 1971, p. 1, as cited in Pallasmaa, 2005, p. 10).

This concretizes Merleau-Ponty's metaphor of the body as "fabric": All senses, including vision, are evolutionary extensions of the skin, and our perception weaves the world with this tactile "flesh." Thus, the meaning of cultural objects (like words) also emerges from this primordial layer of bodily contact, centering physical interaction rather than abstract thought. For instance, let's consider the word "warm." The reason it means something to you is not its dictionary

definition, but the first interaction you felt with your skin when you reached out to something warm as a child, and the reaction your body had.

Figure 9. Embodied Reciprocity, Spatial Layers of Interaction, created by the author.

Cultural and linguistic systems are fundamentally grounded in embodied, physical experience. In architecture, this same principle is materialized as a tactile reciprocity that shapes the very conception of place: viewed through this lens, space is interpreted not as a neutral, abstract grid but as a phenomenological field woven and constituted through the body's pre-reflective engagements with its surroundings. This understanding resonates with Merleau-Ponty's triad of the embodied perceiver, the lived body, and phenomenological space.

At the core of this dynamic is the body's pre-reflective awareness, a hidden dimension of perception that helps us operate beneath explicit thought. Even before conscious awareness, the body anticipates obstacles, adjusts its balance on surfaces, or regulates the force of a grasp on a door handle; these simple samples demonstrate an unconscious understanding of spatial dynamics.

From this perspective, space is not conceived as objective geometry but as lived space, emerging through gestural horizons such as reaching, dwelling, and orienting that intertwine the perceiver and the perceived. This tactile reciprocity, however, does not remain static; it unfolds dynamically through movement, as the body navigates and inhabits space. As the body moves through a room, its gestures, posture, and spatial awareness continuously reconfigure the experience of space, transforming it from a fixed entity into a living process. This shift from space as a fixed entity to space as a living process finds its articulation in Merleau-Ponty's discourse that the body does not merely occupy space but inhabits it. As he describes this as follows: "We must therefore avoid saying that our body is in space, or in time. It inhabits space and time" (Merleau-Ponty, 2002, p. 161).

The hand reaches out and grasps, the eye scans the horizon and estimates depth, the feet test the flexibility of the ground, and the body orients itself between changing proximities. All contribute to a holistic perception that is inseparable from bodily movement (Merleau-Ponty, 2002). In this kinetic fabric structure, space emerges not as an external container but as an extension of the body's own motility, where every step or turn readjusts the perceptual field in real time. Within this embodied and kinetic understanding of space, Merleau-Ponty's concept of the *chiasm* clarifies how bodily movement and spatial formation are reciprocally intertwined with each other. The *chiasm* refers to the reversible relation between the sensing body and the sensed world, in which perception is not directed toward a passive exterior but emerges through a continuous exchange between body and environment. In this sense, space is neither entirely produced by architectural form nor merely traversed by the body; it is shaped through constant encounters. Such exchange enables space to be experienced as responsive and animated through bodily presence, a condition that resonates with animist interpretive approaches to space as relational rather than inert.

If space takes form through reciprocal relationships between body, movement, and material entities, it cannot be reduced to a merely subjective act of human perception. Rather, it emerges

through embodied and dynamic engagement, in which perception unfolds as a constant negotiation between bodily motility and the material world.

Within this phenomenological understanding of space, as lived and enacted, opens onto a broader field in which spatial formation arises wherever bodies, human or non-human, enter into sustained, responsive engagement with their environments. In this sense, spatial relations precede abstract representation and intentional design, and instead emerge through concrete action and material negotiation.

A compelling sample of this relational emergence of space can be found in the construction of a bird's nest. Rather than being conceived through abstract plans, measurements, or symbolic models, the nest comes into being through the bird's bodily capacities and movements, repetitive gestures, and ongoing material encounters. Inasmuch, nest takes shape not as a pre-designed object but as a spatial genesis produced through action and reaction.

From an animist interpretive perspective, the bird cannot be understood as a solitary agent imposing form upon passive matter. Material resistance, environmental forces, and bodily movement actively participate in shaping the final structure. Twigs bend or resist, wind destabilizes, gravity intervenes, and branches afford or constrain support. The nest emerges as a co-produced environment, neither purely natural nor symbolic, but relational. This perspective challenges the anthropocentric assumption that creating space is a uniquely human skill. Instead, it reveals world-making to be a distributed process involving a multitude of both human and non-human actors.

Consequently, within this interpretive framework, space is approached not as a fixed product of architecture or a path to be traversed, but as a relational field in which human and non-human bodies interact and participate in the formation of meaning. From the reach of a hand to the weaving of a bird's nest, spatial experience can be understood as emerging through ongoing negotiations among material processes, bodily perception, and environmental conditions.

Animism, as an analytical lens, emphasizes the perceived vitality and responsiveness of things, allowing space to be interpreted as relational and dynamic rather than inert or solely human-centered. From this perspective, architecture may be reconsidered beyond the abstraction of geometric form, toward a mode of engagement in which the built environment is sensed, inhabited, and continuously reinterpreted through use.

Ultimately, approaching space through animist and phenomenological frameworks suggests a condition in which distinctions between subject and object, human and non-human, and nature and culture are not fixed but are continually reconfigured through perception, movement, and experience. This perspective provides a way of understanding architecture as a shared and participatory field of experience rather than a static object.

3.2 Situated Spatiality

In Merleau-Ponty's phenomenological approach to embodiment, place is questioned by avoiding definite or fixed answers. In this discourse, the body, as a living being, is understood as inseparable from the world in which it exists and is fundamentally intertwined with it. Similarly, Heidegger's phenomenology questions place in the sense of the primordial spatiality of being, without reducing it to a separate entity or an external object. But instead, questions are clear and lived condition of existence. Based on this shared phenomenological ground, this chapter explores the hermeneutic[5]-phenomenological approach of German philosopher Martin Heidegger to situated spatiality, which emphasizes a comprehensive understanding of the interwoven relationship between humans and place, in contrast to the Cartesian conception of space as a mere geometrical extension.

In contemporary thought, space is frequently seen as a three-dimensional void that contains objects. This perspective, based on Newtonian physics and Descartes' idea of res extensa, reduces space to a homogeneous, limitless, abstract container with no inherent meaning, where entities are arranged as quantifiable coordinates (Lefebvre, 1991). This perspective rigidly separates the interconnectedness of humans and space: humans are defined as beings detached from space, and space is a reality independent from humans. In conclusion, the human-space relationship is reduced to a concept that is abstracted from lived experience.

[5] Theory of interpretation (Audi, 1999, p. 377).

In contrast to this view, Aristotle's notion of topos[6] takes a path opposed to this interpretation and emphasizes the act of enclosing. According to the Aristotelian tradition, place is something that is encircled or surrounded by something else, rather than a void. The sample of a hand in a glove can be used to demonstrate this: the place (topos) of the hand is the inner boundary where the glove and skin come into touch, not the empty interior of the glove. Thus, a place is described as the relational boundary that contains a being.

This perspective positions place not merely as a measurable area, but as the relational framework within which an entity exists. In other words, place represents an experiential dimension that gains meaning within space.

Heidegger, however, takes the distinction between place (topos) and space to an even more ontological level. In his seminal work *Being and Time* (1927), Heidegger argues that space is not a geometric vessel into which things are placed. Rather, what we call space emerges abstractly from the daily and experiential relationships that people establish with places.

As he describes this as follows:

" Space is not in the subject, nor is the world in space. Space is rather 'in' the world in so far as space has been disclosed by that Being-in-the-world which is constitutive for Dasein. Space is not to be found in the subject, nor does the subject observe the world 'as if' that world were in a space; but the 'subject' (Dasein), if well understood ontologically, is spatial " (Heidegger, 1962, p. 146). The concept of Dasein, which Heidegger uses without translation, literally means "being-there"; however, this term does not simply refer to a biological or rational "human being." Dasein defines the mode of human existence as a being capable of questioning its own being, always situated in a relational connection with the world, and giving meaning to the world through its experiences. In this passage, Heidegger emphasizes that space is not an independent and abstract container in which objects are placed, nor is it merely a property of the subject. Instead, space is disclosed through the being-in-the-world of Dasein. Consequently, space is not treated as an external reality encountered by human existence, but an internal structure of it, emerging through the everyday practices, engagements, and orientations that define our presence.

[6] "Topos literally means 'place,'" but in philosophical discourse, it goes beyond a simple locational definition. (Aristotle, trans. Kennedy, 2007, p. 44).

Hermeneutic approach:

Heidegger refers to Dasein's interpretive method of understanding its own existence as hermeneutic phenomenology. He defines his analytical approach in this way, often described as existential phenomenology, because in his view, phenomenology is more than a merely descriptive tool; it is an essential method for revealing the fundamental structures of existence. In this framework, interpretation and experience are inseparable. Understanding does not arise from an objective or external perspective, but from how Dasein is actively engaged in the world. Building on Heidegger's concept of Dasein and space, the hermeneutic–phenomenological approach emphasizes that place is not merely a physical location but a site of lived experience and meaning. Through our daily engagement with places, space becomes tangible, and our being is intertwined with the world.

As Heidegger expresses this relational condition and experiential view of dwelling: "I dwell, you dwell. The way in which you are and I am" (Heidegger, 1971, p. 145), he argues that dwelling is inseparable from being itself. Based on this, Ingold interprets Heidegger's claim by emphasizing its relational effects, arguing that "'I dwell, you dwell' is identical to 'I am, you are'" (Ingold, 2000, p. 185). Throughout this reading, emphasis is placed on the interconnection between human beings and their environments. Dwelling is not merely to reside in a place; rather, it is a continuous process of being with and within the world, through which both human existence and place are mutually constitutive. In this sense, dwelling is no longer understood simply as inhabiting a physical location, but as a mode of existence constituted through ongoing and relational engagements between beings and their environments.

From a hermeneutic–phenomenological perspective, understanding a place involves interpreting these relationships, the meanings embedded in daily practices, and how Dasein encounters and constitutes the space around it. Inasmuch, architectural design can benefit from this approach by treating spaces and dwellings not as geometric vessels, but as living, experiential realms that emerge through human engagement, memory, and reciprocity.

3.3 Enaction and Embodied Cognition in Spatial Experience

How do certain environments come to be perceived as threatening, calm, or responsive?

In the phenomenological approach, particularly in the thought of Merleau-Ponty and Heidegger, space is understood as a dynamic and reciprocal field of relationship established between the body, the environment, and the action. In this chapter, this phenomenological understanding will be complemented by examining it from a neuroscience perspective, through Francisco Varela's (1991) conception of *enactive cognition* and Antonio Damasio's (1994) *somatic marker hypothesis*. In this context, spatial experience can be conceptualized as a continuously re-established interaction process between the subject and the world through the reciprocal interaction of bodily-sensory and neural processes.

The perceptual basis of this interactive process can be better understood through the holistic approach of Gestalt psychology. According to Gestalt psychology, perception is not the mental assembly of separate sensory data; rather, it is a dynamic structure organized into meaningful wholes through principles such as figure-ground relationships, continuity, similarity, and closure. The perceived whole is something other than the sum of its parts, and this wholeness allows perception to operate through dynamic relationships rather than fixed representations.

The geometric composition of Victor Vasarely clearly demonstrates Gestalt psychology's approach to perception, which views it not as a static sum of the parts, but as a relational and dynamic whole. The individual oval shapes, while lacking a specific spatial meaning on their own, create a perceptual whole when combined, generating a sense of depth, concavity, and movement. The boundaries between figure and ground are not fixed; depending on the direction of the observer, the area concentrated in the center is sometimes experienced as a collapsing void, sometimes as an overflowing volume.

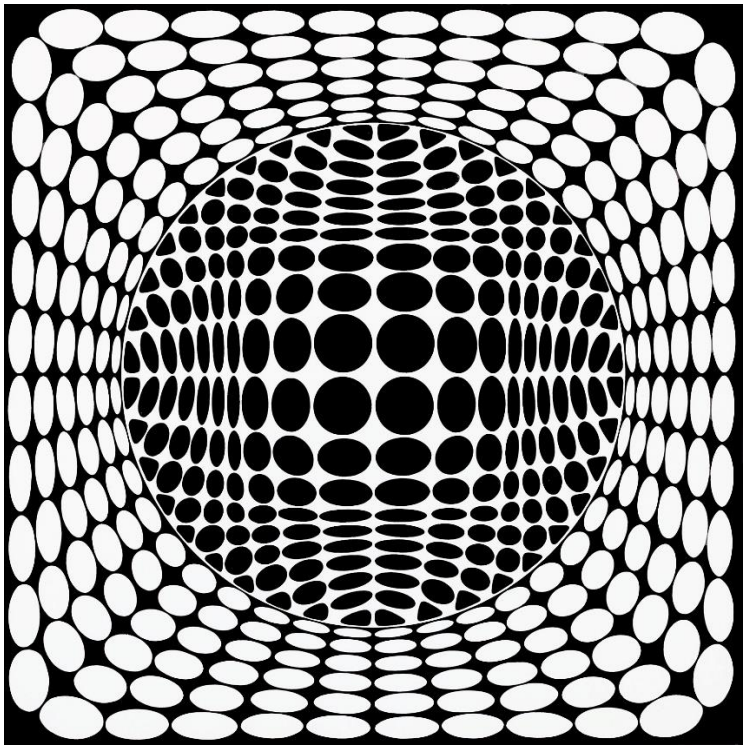


Figure 10. Geometric Composition by Victor Vasarely, 1957.

This indicates that perception is not a static representation, but a continually reorganized process resulting from the subject's movement within the visual field.

Although the Gestalt approach emphasizes the holistic nature of perception, it still conceptualizes spatial experience primarily through the mental organization of the perceiving subject. Consequently, space, while understood as an active product of perception, is not yet fully integrated with bodily action. However, this point is not about attributing ontological vitality to space, but rather about the internal dynamics of perception itself.

In this context, Gestalt does not have a direct representation of an animistic worldview; rather, it opens an epistemological rift that makes it possible to consider space not as a passive background, but in a reciprocal relationship with perception.

This epistemological rift is enriched by James J. Gibson's ecological theory of perception, which investigates spatial experience from perception to action. According to him, there is no division between perception and action, and he claims that they belong to the same logical category.

He transforms the perceptual process from passive observation into an active field of action. Gibson (1979) explains that perception functions not as a mental construction of abstract geometric representations of objects, but as the comprehension of the opportunities (affordances) that the environment directly offers to the observer. This framework removes space from a static visual structure and transforms it into a dynamic network of possibilities that are meaningful according to the individual's bodily capabilities (e.g., mobility, balance, and strength).

For instance, a ramp is more than just a sloping surface; as Gibson points out (p. 32), its low slope makes it a negotiated opportunity. The angle of the ramp makes climbing or descending possible if it is compatible with the observer's walking ability; however, a cliff edge can become a dangerous obstacle.

Ultimately, spatial meaning arises in this reciprocal relationship where the sharp boundary between perception and action[7]dissolves. The environment offers a meaningful structure according to the individual's needs.

Thus, a ramp is not merely a physical mass; it represents an action potential that can be climbed, stopped at, or redirected. Inasmuch, spatial meaning emerges on a reciprocal ground where the distinction between perception and action becomes blurred.

Building on this, Gibson's action-oriented approach gains a more dynamic dimension with Francisco Varela's theory of "enaction." The theory of enaction (Varela, Thompson, & Rosch, 1991) defines cognition as a reciprocal action–perception cycle through which meaning emerges. As Varela articulates, the enactive approach underscores that the organism and its environment are structurally coupled and mutually shape one another (Varela et al., 1991, p. 204).

[7] "By using the term action, we mean to emphasize once again that sensory and motor processes, perception and action, are fundamentally inseparable in lived cognition" (Varela et al., 1991, p.173).

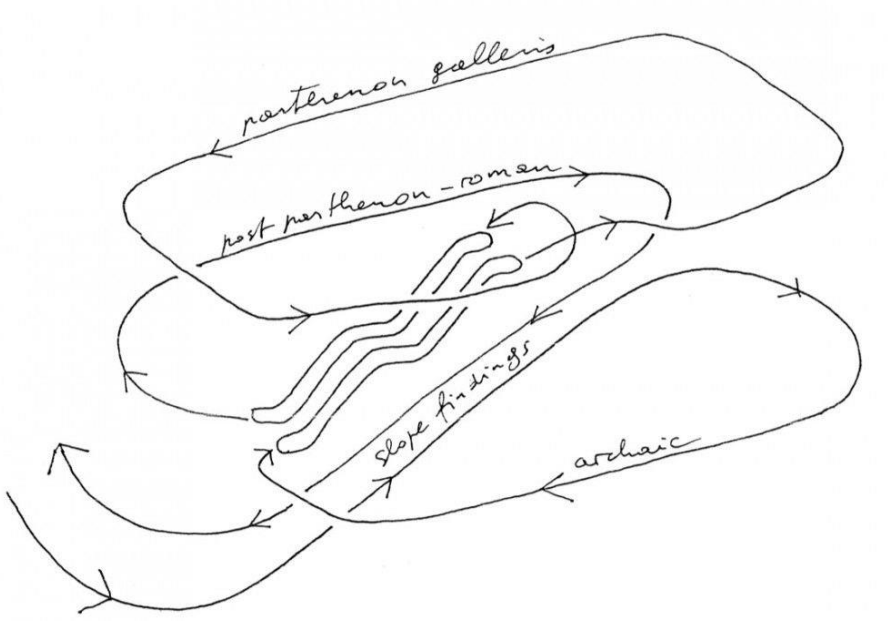


Figure 11. Circulation Diagram of Acropolis Museum by Bernard Tschumi, 2009.

Within a neurophenomenological framework, embodied cognition and enaction reframe spatial experience not as a passive representational model of traditional cognitive science, but as a dynamic, bodily, and relational process that emerges through the continuous interplay between the brain, the body, and the environment.

In this sense, these approaches move beyond the classical cognitivism paradigm by emphasizing the constitutive role of the body in the cognitive process. As Kadihasanoglu (2018, pp. 1788–1810) notes, "Embodied cognition emphasizes the way cognition is shaped by the body and its sensory motor interactions with the world." According to Varela, experiencing a space is not about mentally picturing a static representation of it; it is about constructing the space in action through bodily movements, orientations, and interactions.

For instance, a steep staircase is not merely a 45-degree angle in space; it is enacted as a feeling of effort. The height of the ceiling is not measured in meters; it is a subjective comprehension of openness or pressure relative to our own height. In this context, spatial depth ceases to be a result of geometric perspective; it emerges as a mental projection of bodily effort, orientation, and habits.

Within this perspective, Antonio Damasio's (1994) somatic marker hypothesis emphasizes how emotional and bodily states, such as changes in heart rate and muscle tension, actively shape decision-making and spatial comprehension. This demonstrates that cognition is inextricably linked to affective conditions. These affective signals provide rapid evaluative feedback that modulates how environments are navigated and interpreted. Together, Varela's enaction and Damasio's somatic markers illustrate how spatial perception is inextricably intertwined with bodily action and emotion, not as an explanation of animism itself, but as a means to understand the embodied, relational mechanisms that make animistic perceptions of space possible and intelligible.

3.4 The Bodily Construction of Space: Perception Through Movement and Change

" *One eye sees the other feels* "

— Paul Klee[8]

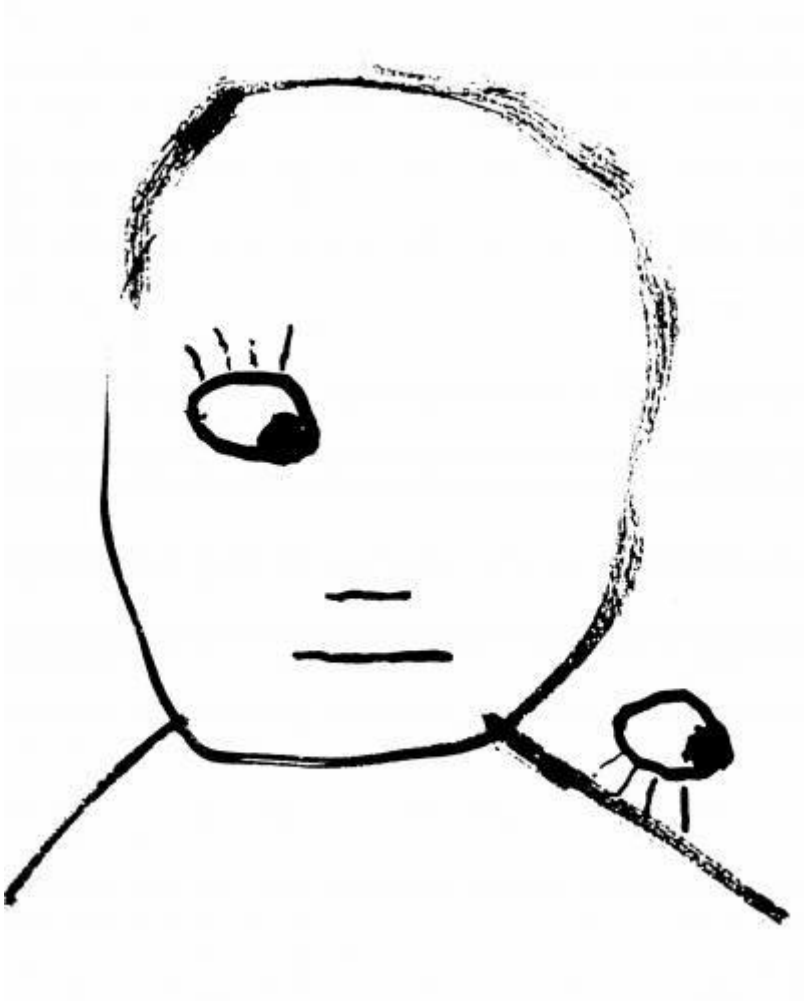


Figure 12. Representation of Bodily Perception by Mieczysław Wasilewski, 1942.

[8] Paul Klee, quoted in Will Gompertz, *Think Like an Artist*, Penguin Books, 2015.

Within the merged framework of Varela and Damasio, space can be defined as the path opened by the body in the world**.** This formulation resonates with Merleau-Ponty's embodiment and Heidegger's notion of *being-in-the-world*, while remaining grounded in neurobiology. Enaction holds that cognition does not represent space but brings it forth through action (Varela et al., 1991). Damasio (1999) adds that this enacted space is always emotionally modulated through somatic feedback. As Damasio argues, the brain represents the environment in terms of the modifications it produces in the body itself, enabling survival through embodied evaluation (Damasio, 1994, p. 214). Somatic markers, bodily states such as tension, comfort, fear, or ease, provide rapid affective feedback that guides spatial judgment and movement (Damasio, 1999). Space is thus not only navigated but felt.

This embodied construction becomes evident in everyday experience. For instance, during a forest walk, Varela's path-opening metaphor demonstrates: Gaps between trees become passable paths relative to your body. Adding this to other layers, Damasio's hypothesis: Proximity to tree walls evokes closeness via potential touch; reaching an open glade brings relief (reachability), gaining emotional values like danger (fear of wildlife) or safety (open view).

Cinematic examples further illuminate this embodied construction, particularly in Stanley Kubrick's films (see Figure 13), where space functions as a character in its own right and acts almost like characters themselves. In The Shining (1980), the Overlook Hotel's labyrinthine corridors are not experienced as a static background but as enacted pathways shaped by Danny Torrance's small body. His tricycle rides through the seemingly endless hallways exemplify Varela's notion of enaction: space emerges through movement rather than pre-existing as a fixed set. As Danny pedals forward, the optical flow of receding walls and abrupt turns generates a visceral sense of proximity to danger. This sensory experience resonates with Damasio's concept of somatic markers, as bodily cues (tightness, anticipation, fear, the child's quickening breath, and widening eyes) signal potential escape routes or looming dead ends. By positioning the camera at a low height that follows Danny's movement, Kubrick aligns the viewer with the child's embodied perspective, mimicking child-scale balance and orientation. Through these affective and perceptual cues, the hotel is transformed into a threatening, unstable terrain of shifting possibilities, defined as much by bodily sensation as by architectural form.

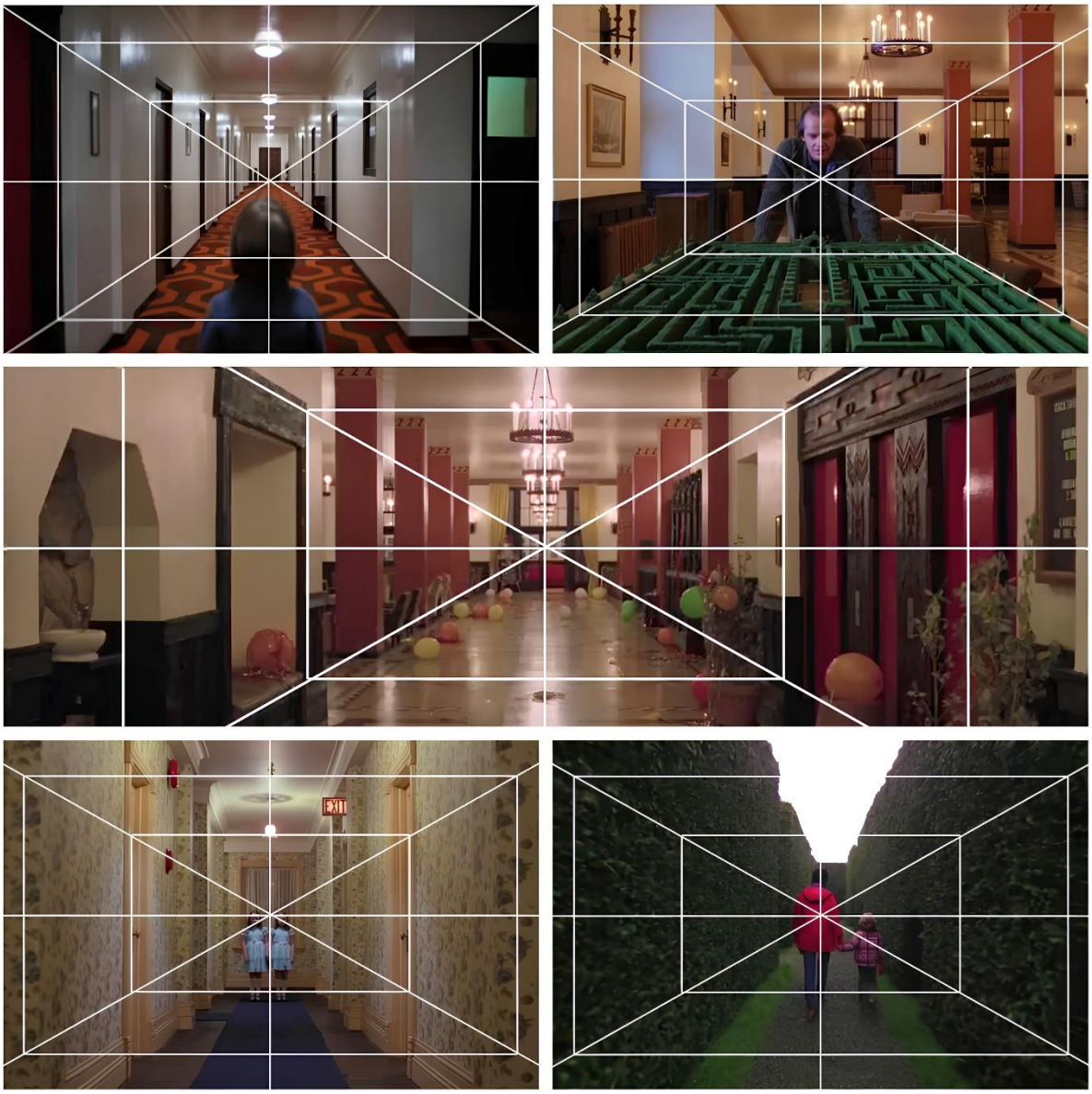


Figure 13. The Use of One-Point Perspective in Stanley Kubrick's The Shining (1980).

Understanding of space as a series of bodily actions and perceptual events finds a direct counterpart in architecture with Bernard Tschumi. Tschumi, in contrast to modernist approaches that viewed architecture as limited to traditional drawings such as sections and plans, proposed an approach that considered the events occurring within or around a building as equally important as the building itself.

Tschumi (1995) states that "Architecture was never pure space. It was always contaminated by event, action, and so on." Manhattan Transcripts takes its name precisely from this view: a series of visual works that record architecture as a "copy" or interpretation of reality, more like transcribing a film scene. The project frames New York's iconic Manhattan district as its scene

because Manhattan, with its density, chaos, and constant movement, was an ideal laboratory for examining architectural theory. He bases each transcript on three fundamental elements: "space, event, and movement. This trio transforms architecture from a static object into a scene of action. The first line represents the space, the second line the event, and the third line the action.

For instance, in column Ax1 (see Figure 14), the vertical lines of a high bridge or viaduct dominate; the sharp corners of the buildings and the metal railings evoke a sense of confinement. In column Ax2, an abstract symbol in the form of a dashed line with a straight arrow. The arrow represents momentum flowing from left to right; the dashed line implies a discontinuous flow. This arrow represents a linear progression. In column Ax3, an acrobat with his legs stretched out on a tightrope. This section demonstrates the concept of maintaining balance while facing the risk of falling. Altogether, the figure on the high bridge runs in the direction of the arrow, facing the risk of an accident or capture.

Overall, general reading is possible across the columns. According to Tschumi's approach, space is the fundamental "stage" of architecture, encompassing physical environments such as buildings, streets, and parks. However, he does not see space as a passive background; he transforms it into an entity that "comes alive" with events and movements.

According to Francisco Varela's enactive cognition approach, perception is not a passive representation but the result of an interaction between the body and its environment. In column A, the vertical lines of the bridge impose a bodily enaction on the user. At the same time, the arrow indicating the direction of movement allows the body to actively engage with and open the space. Within the framework of Antonio Damasio's somatic marker hypothesis, the user's unstable run generates a "body map": fear (the risk of falling) and excitement (momentum) transform the space into a network of bodily emotions, making architecture not an abstract object but an experience rooted in Damasio's concept of the bodily mind.

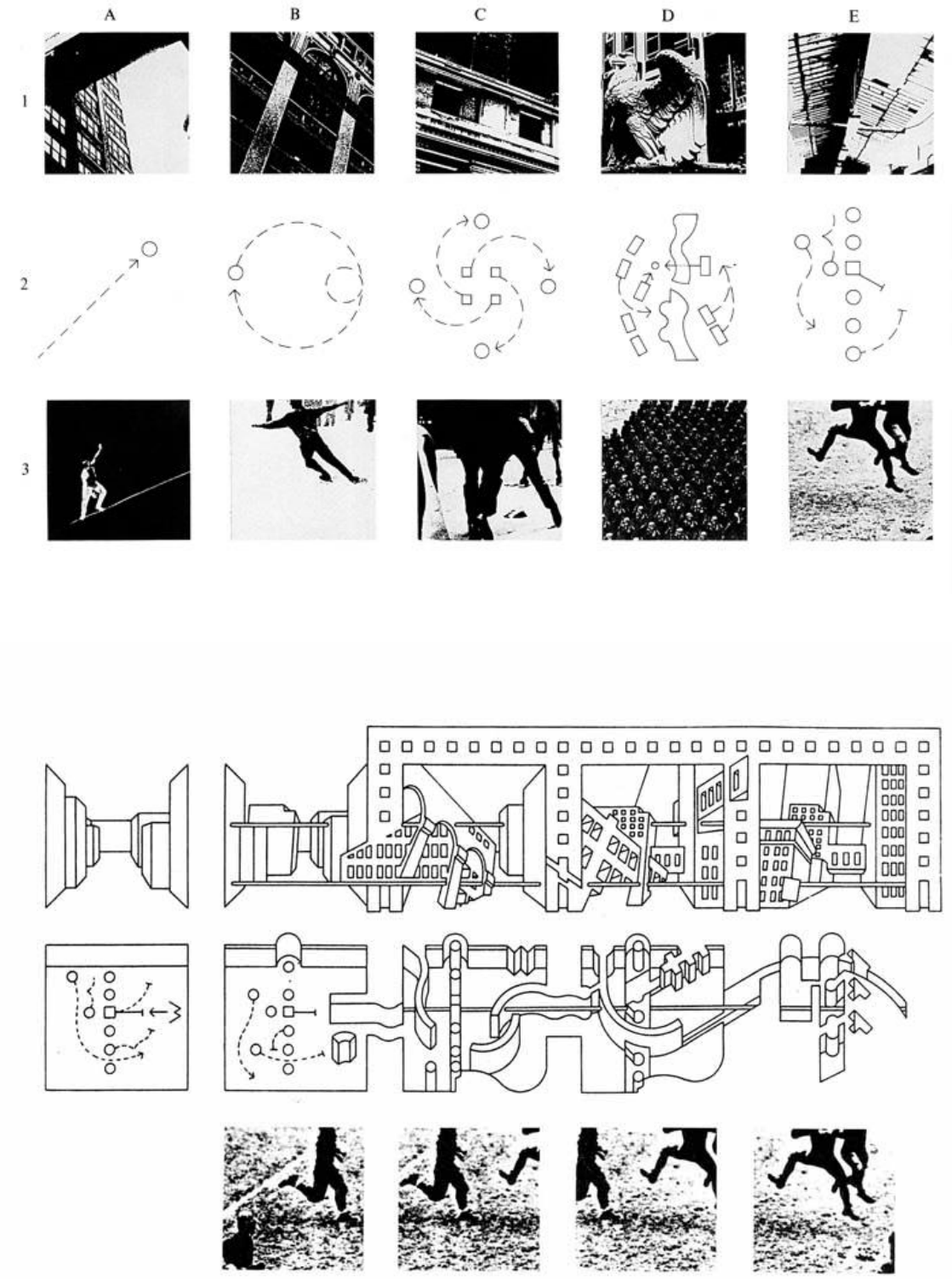


Figure 14. The Manhattan Transcripts by Bernard Tschumi, 1976–1981.

In conclusion, this analysis demonstrates how architecture, movement, and perception intersect, reframing the observer as an active participant rather than a passive viewer, and allowing space to be understood as a lived, bodily experience. In this context, space is no longer approached as a fixed container or a mentally coded map; instead, it can be interpreted as being dynamically and situationally constituted through bodily movement, sensorimotor engagement, affective states, and environmental conditions.

Spatial experience, in this sense, can be understood as a fluid relational process, shaped through ongoing interactions among action, perception, and emotion. Within architectural theory, this perspective encourages a shift away from viewing space as a passive vessel toward understanding it as a relational field that participates in human–world engagement.

From an animist perspective, this embodied and enactive understanding of space can be approached through the idea that environments, including architectural spaces, can be experienced as if they possess forms of agency and engage with human presence in reciprocal ways. These expressions describe modes of relational engagement rather than literal claims about consciousness in material environments.

Animism, in this framework, operates not as a metaphysical assertion but as a mode of knowing. It does not claim that non-human entities possess agency in an objective ontological sense; rather, it reveals how agency is *perceived, distributed, and interpreted* within lived experience. While phenomenology clarifies the embodied structure through which space is encountered, animism expands the epistemic horizon by rendering relational and more-than-human dimensions of experience intelligible. Together, they articulate a non-dualistic understanding in which spatial meaning emerges through lived engagement and relational interpretation rather than ontological separation.

In this sense, architecture does not simply host human action; it can be conceptualized as meeting it in a kind of "handshake" (see Figure 15), where bodily intention and material response momentarily align, bringing space into being through their mutual contact.

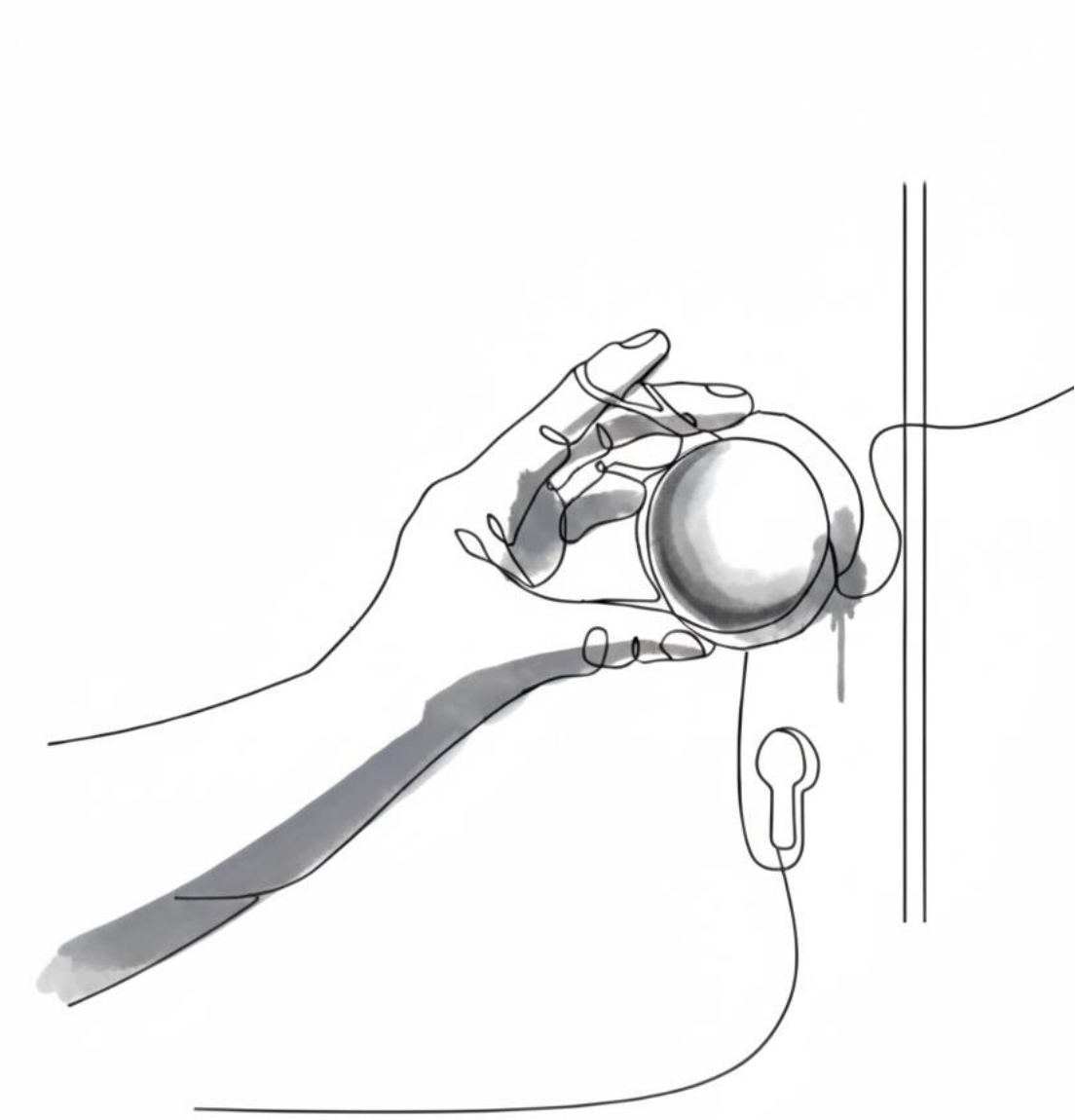


Figure 15. Handshake Metaphor, sketch created by the author.

3.5 Phenomenology and the Threshold of Animistic Interpretation

> “*The "meaning"*
>
> *of any object consists in its relationships to*
>
> *other objects, that is,*
>
> *it consists in what the object "gathers"* ”
>
> — Norberg-Schulz,1980

The phenomenological approach developed throughout this chapter demonstrates that can be interpreted not merely a geometric vessel but a realm constructed through bodily experience and sensory interaction. Within this framework, architecture is understood as a sensorium that works in balance with the perceptual, affective, and motor capacities of the human body. Space is experienced through sight, touch, orientation, and movement, and its meaning derives from the relationship the human body establishes with the world around it.

However, this strength also reveals a critical limitation. Because phenomenology grounds spatial meaning in lived experience, it places the human body at the center of interpretation. As a result, experiences of space as responsive, affective, or alive-like are primarily explained through the orientation of the human sensorium toward the world. Spatial vitality, from this perspective, does not reside in space itself but emerges through perceptual and experiential processes centered on the human subject.

It is at this point that the concept of *genius loci* introduces a productive tension. “According to ancient Roman belief every “independent” being has its genius, its guardian spirit. This spirit gives life to people and places, accompanies them from birth to death, and determines their character or essence ” (Norberg-Schulz, 1980, p. 18). This notion opens a conceptual space in which spatial character cannot be reduced solely to human perception.

Christian Norberg-Schulz, a Norwegian architectural theorist, develops the concept of the "spirit of place" through tangible architectural examples in his book *Genius Loci: Towards a Phenomenology of Architecture* (1980). He develops this idea through architectural examples that emphasize continuity, material persistence, and environmental specificity.

For instance, Rome's genius loci is examined through the historical layers of the city, such as ancient forums, Baroque squares, and the natural flow of the Tiber River. According to Norberg-Schulz, Rome's "spirit" is not merely a collection of historical artifacts perceived by visitors through bodily experiences of seeing, touching, and wandering; rather, it is a city marked by a recognizable spatial coherence that persists across time. The interaction of built form (the echo of the wind on stone walls, the shadows created by the flow of water), topography, climate, and material weathering contributes to an experience of place that exceeds momentary bodily perception.

Norberg-Schulz discusses Rome not as a mere assemblage of architectural remnants from different historical periods, but as a city characterized by a persistent and recognizable spatial continuity (Norberg-Schulz, 1980, p. 138). According to him, Rome's architectural identity is immediately recognizable, regardless of stylistic differences, and reveals a unique capacity for self-renewal. The city appears to maintain a form of continuity and responsiveness that cannot be fully explained through immediate sensory interaction alone.

A similar insight is articulated through literary means in Italo Calvino's *Invisible Cities* (1998), particularly in the description of the city of Zaira.

Calvino, in describing the city's expansion by absorbing memory, emphasizes an agency of space that goes beyond human perception. Space, in this depiction, acts as an accumulated field of memory rather than a passive backdrop:

"*As this wave from memories flows in, the city soaks it up like a sponge and expands. A description of Zaira as it is today should contain all Zaira's past.*

The city, however, does not tell its past, but contains it like the lines of a hand, written in the corners of the streets, the gratings of the windows, the banisters of the steps, the antennae of the lightning rods, the poles of the flags, every segment marked in turn with scratches, indentations, scrolls " (Calvino, 1998, Cities & Memory, p.10).

Figure 16. Illustration of Zaira, created by the author.

Calvino’s metaphor evokes that spatial meaning emerges not only through present perception, but through temporal depth and material inscription. The city appears to contain its past, not as a conscious subject, but as a layered spatial condition shaped by time, use, and material endurance. In this sense, space is encountered as if it possessed an interiority that exceeds the immediate reach of the human sensorium. Calvino's depiction positions the genius loci as an inclusive memory that transcends the boundaries of the phenomenological sensorium; space acquires a nonhuman subjectivity as it accumulates time.

Consequently,

From this perspective, animism provides a conceptual and interpretive lens for recognizing experiences in which spatial meaning cannot be fully accounted for by phenomenology alone. While phenomenology explains how space is lived and perceived, it reaches a threshold when confronted with experiences in which space is encountered as temporally deep, materially resistant, or seemingly autonomous.

The concept of genius functions as a tool to emphasize the relational status of space as involving non-human actors, without claiming literal subjectivity. At this point, the following question becomes inevitable: *Is the experience of space, whether live-like or responsive, solely a result of human perception, or does it emerge through the involvement of non-human material and environmental agents?* The phenomenological approach raises this question but does not provide a complete answer. This very lack of an answer constitutes a theoretical threshold for the frameworks of thought on matter, agency, and posthumanism, which will be discussed in the next chapter. Through this threshold, the logic of genius loci makes it possible to rethink space not merely as a field experienced solely by humans, but as a field where humans, non-human entities, and temporal, material actors co-constitute relational worlds.

This threshold expands the human-centered horizon of phenomenology with an animistic meshwork, allowing architecture to be read as a process of relational becoming.

At this expanded threshold, the question of how such relational and alive-like spatial experiences are sustained and enacted becomes unavoidable. If spatial meaning exceeds immediate perception and unfolds through temporal depth, material endurance, and recurring engagement, then it must also be enacted through structured modes of bodily action. Space is not only encountered, but repeatedly entered, crossed, touched, and negotiated. These patterned

actions do not merely accompany spatial experience; they actively participate in its formation, allowing relational qualities to persist beyond singular moments of perception.

In this sense, ritual can be approached as a spatial condition through which animist relations become experientially concrete. Rather than being understood as symbolic representation or religious practice, ritual refers here to the embodied, repetitive, and relational enactments that stabilize spatial meaning while remaining open to change. Operating at the intersection of body, matter, time, and memory, ritual articulates how non-human agencies can be understood to participate in the ongoing constitution of space.

Through ritualized gestures and actions, space is neither reduced to human perception nor attributed with autonomous life; instead, it can be described as a relational field continually brought into being. This understanding establishes ritual as a critical conceptual hinge between phenomenology and posthuman theories of matter and agency, providing a groundwork for examining how animist spatial relations can be articulated architecturally. We examine this section in detail at the end of the next chapter (see Chapter 4.6.1: From Atmospheric Agency to Ritual Repetition).

Chapter 4

Matter and Agency in Posthuman Thought

" *Everything we see hides another thing, we always want to see what is hidden by what we see* "

— René Magritte, 1964

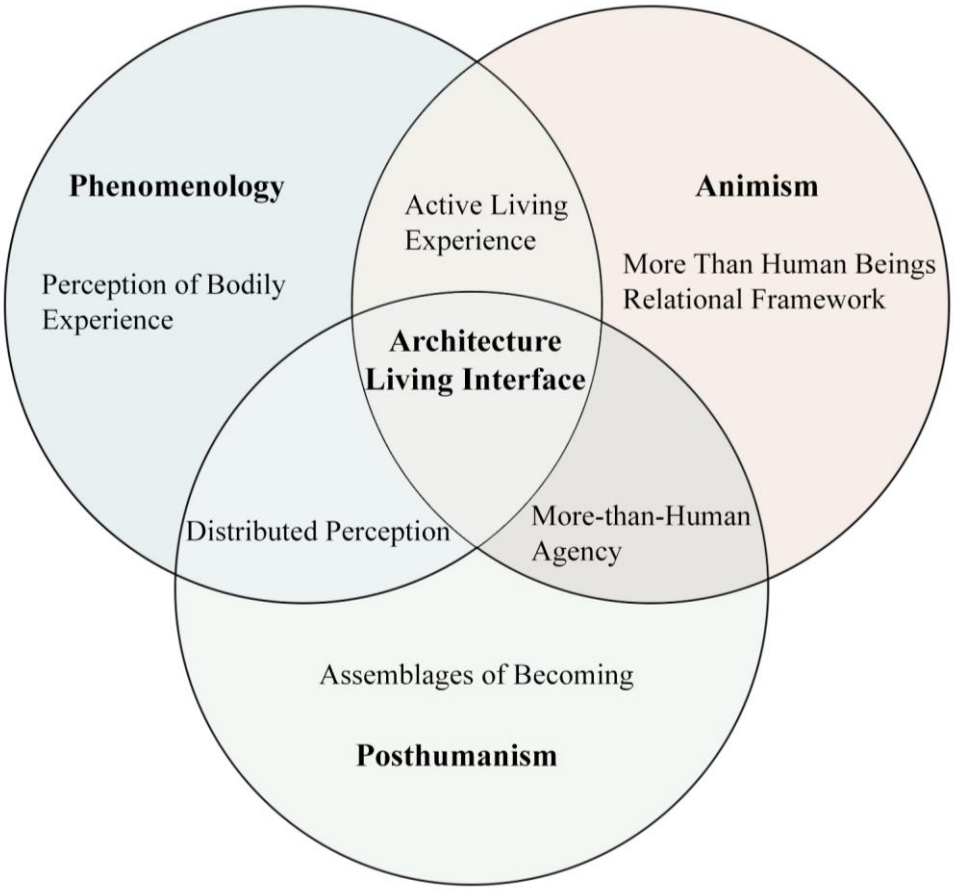


Figure 17. Diagram: The intersection between Animism, Phenomenology, and Posthumanism, created by the author.

While the phenomenological approach fundamentally frames place as a sensorium structured through embodied perception, it remains largely dependent on the human subject as the primary site of experience. If a place is understood as animated, responsive, and relational, a question emerges: *Is the perceived vitality of architecture merely ascribed by human perception, or does it emerge as a relational capacity within larger material-spatial assemblages?*

This question invites us to move beyond a human-centered aspect of phenomenology, toward posthuman theories that, when adopted as epistemological lenses, allow us to recognize the distributed agency of matter as an analytical category. All references to vitality, agency, or liveliness in matter should be understood as relational capacities emerging within assemblages, not as ontological attributes of independent subjectivity or human-like intentionality.

Building on this, the relational perspective of animism (Chapter 2) and the bodily spatiality of phenomenology (Chapter 3) converge with posthuman thought as interpretive tools. This chapter employs animism as a relational and interpretive epistemological framework for rethinking architectural space and materiality, rather than as a metaphysical claim about the inherent life or subjectivity of matter. Animist perspectives, alongside posthuman theories, serve here as analytical lenses to challenge anthropocentric dualisms and to foreground the distributed, emergent qualities of agency within our epistemological reading of material-spatial relations.

Within this epistemological framework, posthumanism can be understood as challenging anthropocentric dualism by proposing read matter not as a passive object, but as a dynamic component within relational processes. This shift allows us to rethink ecological and spatial relationships epistemologically, viewing matter and architectural space not merely as perceived objects but as participants in relational assemblages.

Posthumanism fundamentally questions the human-centered dualism of Enlightenment philosophy (the separation of human/object and subject/environment). Although its intellectual roots extend back to antiquity, this human-centered worldview became a significant influence in Renaissance architecture. In *De Architectura*[9] (Vitruvius, 1st century BCE), Vitruvius

[9] Vitruvius (1914/1st century BCE) establishes the following proportions by applying the ratios of the human body to architectural symmetry: " The length of the foot is one sixth of the height of the body; of the forearm, one fourth; and the breadth of the breast is also one fourth. The other members, too, have their own symmetrical proportions,

proposed the human body as a reference point for universal proportions, a framework that Renaissance thinkers later reinterpreted. Leonardo da Vinci's Vitruvian Man (this was implicitly based on the male model of the human being) embodied this approach as a symbolic norm, to make architecture compatible with the human scale.

By positioning the human body as the ultimate standard, this human-centered framework of measurement overlooks the influence of non-human entities. Nature is frequently regarded as a subordinate context, structured and organized according to human proportions and requirements, and human-space interactions reinforce a hierarchical vision in which humans are prioritized over the environment. This produced an epistemological framework that obscured the relational and multi-actor nature of space.

Italian philosopher and leading scholar of posthumanism, Rosi Braidotti (2013, p. 37), indicates that the current crisis marks the historical conclusion of the opposition between humanism and anti-humanism. At this point, posthumanism opens up a new field by problematizing universal human assumptions such as teleological progress, which the Enlightenment placed at its center. Posthumanism, according to Braidotti, goes beyond merely pointing out the limitations of humanism. It develops affirmative alternatives through the structural others, including feminist movements, anti-racist and decolonial struggles, and environmental thought.

and it was by employing them that the famous painters and sculptors of antiquity attained to great and endless renown " (Book 3, Chapter 1, pp. 72-74).

4.1 Rethinking Matter: Between Mechanism and Vitality

"*Stone, brick and wood are different "presences"*

which express the way buildings "are" on earth.

— Norberg-Schulz,1980

The reconceptualization of matter in contemporary thought signifies a major shift in spatial understanding and interpretive logic. In the 17th century, Robert Boyle's mechanistic approach positioned matter as a passive, inert entity reducible to matter and motion. Boyle explicitly rejected Aristotelian[10] essential forms and the idea that design, passion, or vital agency could be attributed to inanimate objects. He regarded these concepts as metaphysical nuances rather than empirical realities (Boyle, 1666). As a result, nature came to be interpreted no longer as an active, interconnected whole, but as a collection of individual particles whose properties emerged from mechanical interactions, making them measurable and manipulable.

This mechanistic view was further reinforced by Cartesian dualism, which entrenched a sharp separation between subject and object. In Cartesian logic, space became a realm of the absolute. As the object countered the subject, and res extensa contrasted with res cogitans, space took on a significant role, encompassing both the senses and physical bodies. (Lefebvre, 1991, p.1).

[10] In Aristotelian philosophy, matter (*hulê*) is seen as an indeterminate substrate embodying pure potentiality. It becomes a determinate entity only through its union with form (*eidos* or *morphē*), a dialectical relationship known as hylomorphism (matter and form). Within this view, materials gain meaning from their interaction with form rather than simply existing as passive objects. This is akin to how a craftsman utilizes wood or clay in their creations. (see "Form vs. Matter," in Stanford Encyclopedia of Philosophy, https://plato.stanford.edu/entries/form-matter/).

Consequently, materiality was stripped of its sensory, experiential, and expressive capacities, reduced to a functional and measurable sub-layer within architectural production.

This mechanistic reductionism found its most striking expression in the modernist architecture of the early 20th century. The Bauhaus school, which operated from 1919 to 1933 under the leadership of Walter Gropius, along with its key figures such as Mies van der Rohe and Marcel Breuer, applied the principles of industrial production to architecture. Central to this approach was the principle originally articulated by Louis Sullivan in his 1896 essay *The Tall Office Building Artistically Considered*, where he stated: " form ever follows function, and this is the law " (Sullivan, 1896, p. 408). Architects interpreted it differently according to their own philosophies. Frank Lloyd Wright, whose work Mies studied closely and deeply respected, advanced it by insisting that form and function are inseparable: one unified whole rather than a one-directional relationship.

Likewise, Mies van der Rohe does not understand "form follows function" as a removal of form. On the contrary, he drew lifelong inspiration from classical principles such as proportion, order, and structural clarity and from Aachen Cathedral, where he apprenticed as a stonemason in his youth and absorbed lessons in material honesty, spatial unity, and tectonic expression.

The core issue does not stem from the phrase itself, which remains open and contextual, but from how it was later narrowed by industrial pressures and postwar practical demands into a more rigid and often misinterpreted doctrine.

A significant example of these ideas in practice is the Bauhaus Building in Dessau (1925–1926). Featuring glass curtain walls, open floor plans, a steel frame, and reinforced concrete, the structure achieves transparency and functionality reminiscent of industrial spaces, while eliminating applied ornamentation to ensure that every element is measurable, rational, and reproducible.

It would be incorrect to claim that the International Style, influenced partly by the Bauhaus, completely detached architecture from national or regional traditions to impose a single, mechanized, universal code.

The Bauhaus movement itself emphasized a situational mindset: its designers adapted core ideas such as functional clarity, new materials, and industrial logic to fit specific places,

cultures, and needs, allowing the principles to evolve and mutate locally while still achieving broad international resonance.

The more standardized, globally uniform vision that we associate with the International Style actually took a more solid form later, particularly at the CIAM congresses beginning in 1928; at these congresses, Le Corbusier's advocacy of machine-age rationality, standardization, and universal solutions played a dominant role.

Drawing direct inspiration from the machine aesthetics and scientific rationality of the industrial revolution, modernist architects conceptualized the building as a passive "mechanical system." One of the most well-known examples of this concept is Le Corbusier's famous statement: ‘‘The house is a machine to live in’’ (Le Corbusier,1923/1931), which embodies this mechanistic understanding of architecture, framing the building as a rational apparatus optimized for efficiency and functional performance. Within this framework, space and materiality are positioned as neutral and subordinate elements, serving predefined human needs rather than engaging as active participants in spatial experience.

While this mechanistic understanding of architecture introduced unprecedented technical precision and environmental standards, it also reinforced a hierarchical separation between the human subject and the material environment. Matter was treated as mute and obedient, devoid of agency, temporality, or affective presence. It is precisely at this point that the limitations of mechanistic ontology become apparent. By conceiving materiality as passive and space as an abstract container, modernist thought struggled to account for lived experience, sensory perception, and the meaningful engagement between body, material, and environment.

Christian Norberg-Schulz’s phenomenological critique emerges here as a crucial threshold between mechanism and relational vitality. Rejecting the abstraction of Cartesian space, Norberg-Schulz argues that human existence is fundamentally grounded in place rather than in neutral space. In *Genius Loci* (1980), he emphasizes that architectural space acquires meaning through its material presence, atmosphere, and capacity to gather human experience.

Although Norberg-Schulz does not explicitly attribute agency or vitality to matter in an animist sense, his insistence on the expressive and existential qualities of material environments marks a decisive departure from mechanistic reductionism. Matter is no longer merely functional; it becomes a bearer of meaning, memory, and orientation through relational processes.

This phenomenological reorientation exposes a critical tension within modern architectural thought: If materiality is more than a passive substrate and space is experienced rather than merely occupied, then the mechanistic model proves insufficient. The growing awareness of this insufficiency opens a conceptual space in which matter can be reconsidered not only as form and function, but as participating within spatial relations. It is within this unresolved interval between mechanism and vitality that contemporary discourses on material agency, embodied perception, and animistic modes of interpretation in architecture begin to take shape.

4.2 The Agency of Matter

In posthumanist thought, matter radically reconfigures the passive, inert framework of being that has long dominated Cartesian duality. The Cartesian dualism established between *res cogitans* (the thinking subject) and *res extensa* (the extended object) positioned matter as an object devoid of inherent meaning or affect; it was reduced to a mere background shaped, controlled, and utilized solely by the intentions of the human subject (Descartes, 1641/2008). In other words, it was fundamentally incapable of being a source of action.

Posthumanism, however, challenges this reductionist approach by redefining matter not as a passive carrier but as an active participant in relational processes (Bennett, 2010).

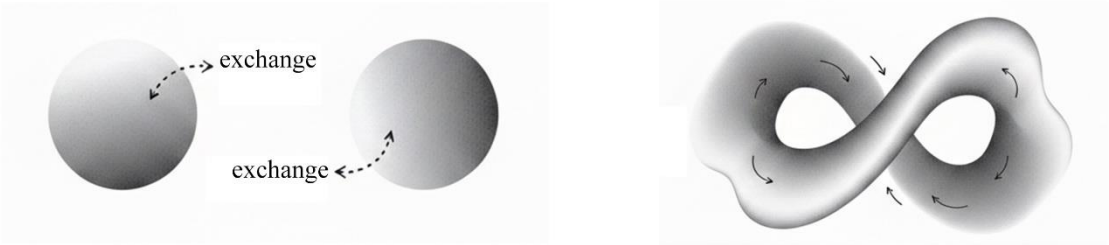
In this thesis, agency is employed as an epistemological and analytical category: it refers to relational and distributed capacities emerging within assemblages, not as ontological subjectivity or intentionality inherent to matter.

In this context, "agency" is not a human-centered attribute of will or thought but a performative effect arising through relational interactions between material and discursive processes.

Karen Barad's framework of agential realism further clarifies this position: agency is not a property inherent in pre-defined subjects; rather, it is a field of effects produced through the intra-actions of entities. While interaction implies an exchange between already-formed actors, intra-action emphasizes a process that unfolds from within relational configurations themselves. Agency, Inasmuch, is not a property inherent in bounded subjects, human or non-human, but a

field of effects produced through these intra-active entanglements of material and discursive practices.

While Barad develops a strongly ontological account of relationality (Barad, 2007), this thesis adopts her framework primarily as an analytical model for understanding how spatial effects emerge through relational configurations, rather than as a metaphysical claim about the nature of reality.



Separate, pre-defined entities Inseparable, mutually constitutive progess

Figure 18. Diagram of Classical Interaction and Baradian Intra-action, created by the author.

Matter, in this sense, is not conceptualized as a self-acting subject in isolation, but as an integral component of intertwined formations that continuously shape the world. Consequently, agency ceases to be treated as an exclusively human privilege and becomes interpretable as a process dispersed across human and nonhuman participants.

Jane Bennett's seminal work, *Vibrant Matter: A Political Ecology of Things* (2010), approaches this material efficacy through the concept of "vibrancy." Bennett writes: "I have been trying to raise the volume on the vitality of materiality per se… depicting [nonhuman bodies] as actants rather than as objects. But the case for matter as active needs also to readjust the status of human actants" (Bennett, 2010, p. 10). Through this analytical shift, she challenges the anthropocentric hierarchy that separates active subjects from passive material objects.

According to Bennett, matter exhibits a form of "thing-power," understood as the capacity to produce effects through encounters and assemblages without presupposing consciousness or intentionality. Within this perspective, matter is not approached as a static entity but as a field of potentials that may reconfigure outcomes in specific contexts. Rather than framing matter as

inherently active in an ontological sense, this approach allows it to be interpreted as participating in the co-constitution of shared environments.

While Barad's framework integrates existence and knowledge within an onto-epistemological structure, Bennett's vital materialism foregrounds the ecological and political implications of material efficacy. In this thesis, her notion of "thing-power" is employed selectively as an analytical tool to describe how material configurations give rise to spatial effects, without implying animistic subjectivity or intrinsic agency. In this way, Bennett's work contributes to a relational reading of the built environment while remaining within an interpretive, non-metaphysical framework.

Agency as Architectural Operation

Agency is fundamental to architecture because space is not a fixed outcome of form, but an emergent condition produced through the dynamic interplay of matter, climate, technology, and inhabitation.

Consider, for instance, Louis Kahn's well-known reflection with brick, as stated at the outset: this is not an arbitrary anthropomorphism, but a posthumanist recognition of material constraint and affordance. Brick prefers the arch not in an intentional sense (as suggested by animist beliefs), but because its compressive strength and thermal mass interact with gravity, mortar, and human labor to produce structural stability. What appears metaphorically as "refusal" can be analytically understood as the structural constraints introduced by the material's compressive behavior, which condition the range of viable formal solutions.

Acknowledging the agency in this relational sense also requires moving beyond a linear and mechanical understanding of causality prevalent in modern thought.

In a posthumanist perspective, affect arises not from a singular, directional cause-and-effect relationship, but from a network of multiple and simultaneous interactions. From this view, matter is not a fixed or static entity; it is a dynamic process in constant interaction with time, space, body, and environmental conditions. Therefore, material agency should be understood

not as a controllable or entirely predictable force, but as an open-ended performativity through which spatial conditions continuously transform.

This relational understanding can be extended across three interconnected scales from the micro level to the macro level:

Material (detail), environmental (section), and systemic (infrastructure). When agency is examined as a process of collectively producing effects, attention shifts from individual actors to the relational configurations through which spatial consequences emerge.

I. Detail as Relational Node

Detail is the scale at which materiality, texture, and tactile engagement are revealed. Here, architecture can be interpreted not as a representative object, but as an interactive configuration.

In this direction, a facade joint is not just a simple connection; it is a location where thermal expansion, moisture migration, structural movement, and tolerances converge. Expansion gaps, drainage cavities, vapor barriers, and fixings do more than merely serve a design purpose; they work to balance climatic forces and construction systems. The spatial performance of a structure arises from this balance. In this context, "agency" refers to the collaborative production of effects between these interacting elements as conceptualized in our interpretive lens.

The ETFE (Ethylene Tetrafluoroethylene) cushion system provides a compelling instance of this condition. ETFE can be installed as double or triple-layered pressure cushions filled with low-pressure air. These lightweight and transparent systems are supported by metal frames, providing both insulation and flexibility (Nahar et al., 2023). This dynamic assembly enables natural daylighting and reduces the need for artificial lighting.

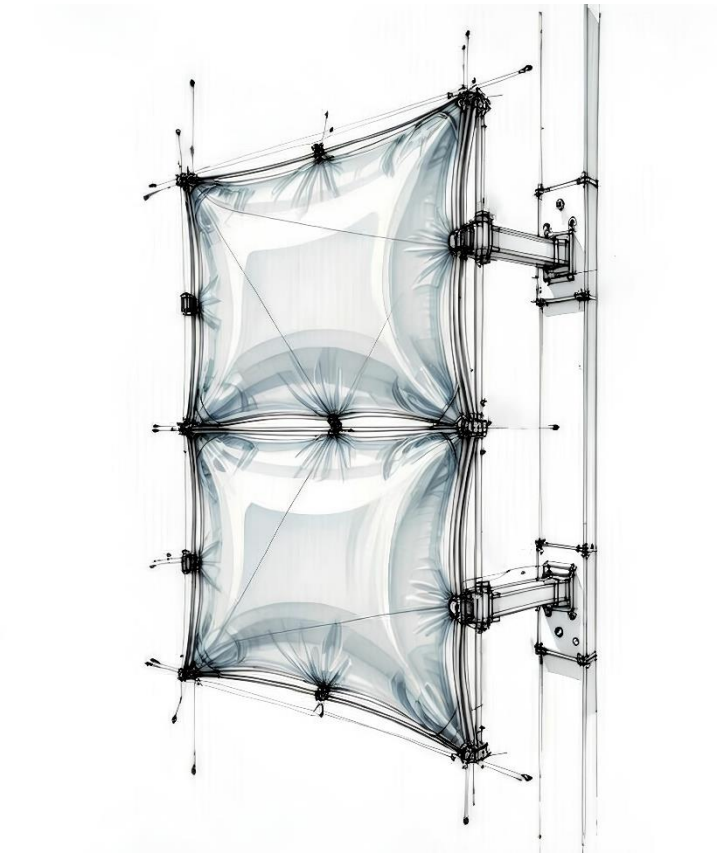


Figure 19. Detailed sketch of the ETFE facade, created by the author.

The cushions interact dynamically to environmental factors: temperature changes cause air to expand and contract, wind forces influence pressure stability, and solar heat affects the internal microclimate. Within this context, agency can be understood as distributed across the ETFE film, air layers, mechanical support systems, climatic forces, and patterns of human occupation. This interconnected assembly enables the simultaneous modulation of daylight quality, energy performance, and atmospheric continuity within large enclosed spaces.

A similar interpretive logic can be observed at a smaller scale. Consider a doorstep, particularly a wooden one, in a humid climate. Wood absorbs moisture, swells, dries out, and cracks. These microscopic changes affect the door's closing tolerance, airtightness, and sound transmission, and even transform user behavior, such as closing the door harder or leaving it ajar.

Within this analytical perspective, “agency” refers to the network of micro-interactions among the threshold, humidity, air pressure, and the material’s internal structure. These relations can be understood as continuously shaping spatial experience. The door threshold is therefore not

merely a passive detail, but can be interpreted as a site of ongoing negotiation between microclimatic forces and human interaction.

This micro-relational condition is not limited to small-scale material phenomena; a similar logic also operates within structural nodes. Consider a steel column–beam joint (see Figure 20). Thermal expansion, vibration, load redistribution, and assembly tolerances converge at this connection. When a degree of flexibility is allowed, vibration is dampened, sound transmission shifts, and user comfort is subtly affected.

The joint thus exceeds its role as a purely load-transferring element; it becomes an operative interface that regulates interactions between heat, vibration, sound, and the human body.

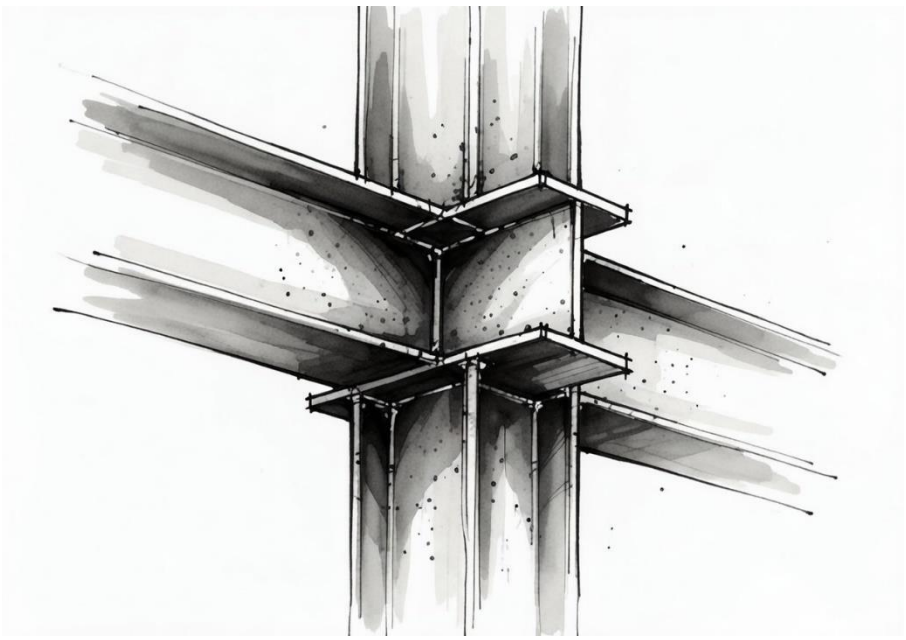


Figure 20. Sketch of the Column–beam joint, created by the author.

Here again, agency resides not in intentional action, but in the dispersed negotiation between material behavior, environmental forces, and structural constraints.

Taken together, the readings from the facade, doorstep, and column-beam joint demonstrate how agency functions consistently across various scales, from micro-scale material interactions to the details of larger structural and systemic configurations.

In each sample that we discussed, detail serves as the scale at which posthuman agency becomes architecturally legible. It reveals how material behaviors, environmental conditions, and technical systems can be understood as co-producing spatial experience. Within this framework, agency is not a property inherent to matter itself, nor does it imply intentionality or animistic subjectivity; rather, it emerges as an interpretive category through the continuous negotiation among materials, environmental forces, and operational systems.

Bennett's concept of "thing-power" is employed here selectively. It functions as an analytical instrument to describe how material arrangements elicit spatial effects, emphasizing the performative and synergistic capabilities of matter without assuming consciousness or will.

II. Section and Plan as Environmental Mediator

Architectural sections and plans are conventionally understood as a representational tool: a drawing that reveals spatial organization, structural hierarchy, vertical and horizontal relationships. However, when agency is examined as a collectively produced field of effects, both section and plan can be reconsidered not merely as representations, but also as an environmental mediators.

Section as Vertical Mediator:

The section organizes the interplay between air, light, heat, sound, gravity, and occupation. It structures vertical gradients, thermal stratification, pressure differences, acoustic reverberation, and illumination levels that continuously shape our spatial experience. Within this analytical perspective, the section does not merely describe space; it defines the conditions under which environmental forces interact.

The section mediates daylight penetration. The depth of floor plates, the angle of light wells, and the reflectivity of interior surfaces together determine how light diffuses, intensifies, or diminishes across space. This relational capacity is clearly illustrated in the section of a reflective interior surface documented by Thomas Schielke (see Figure 21).

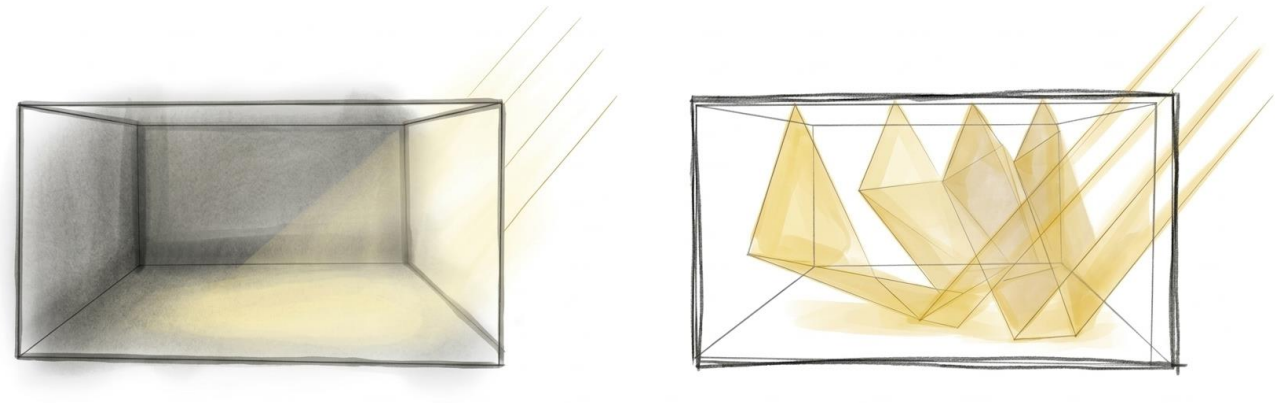


Figure 21. Section of Reflective Surface in Interior Design, adapted and redrawn by the author from Thomas Schielke, 2014.

In the first diagram (left), light enters from a lateral opening and strikes a single inclined surface. The reflection is predictable and directional. In the second diagram (right), the reflective surface is fragmented into multiple angled planes. Incoming light undergoes successive reflections. What changes between the two conditions is not the light source, but the sectional configuration itself.

The section functions as an environmental diagram that stabilizes the relationships between solar radiation, material reflectance, atmospheric conditions, and human perception. Acoustics provide a parallel instance: factors such as ceiling height, sectional curvature, and material absorption coefficients work together to influence reverberation time and sound propagation.

In all these cases, the section does not act intentionally. Instead, it reconfiguresthe flow of forces across vertical space. It shapes how gravity, heat, light, and sound circulate and stabilize. Within this analytical approach, "agency" refers to the distributed production of environmental effects through sectional geometry, as positioned within our epistemological reading.

Plan as Horizontal Mediator:

While the section organizes vertical gradients of light, heat, and air, the plan, in turn, mediates horizontal aspects of occupation, circulation, boundary, and material transition.

It organizes how spatial zones channel or interrupt environmental flows and social interactions, affecting how bodies move through and inhabit space. Walls, corridors, openings, and partitions actively influence airflow, sound transmission, visual continuity, and spatial orientation.

The layout of the plan, whether open, divided, or hybrid, determines how these forces circulate across the floor level, influencing thermal comfort, visual connectivity, acoustic privacy, and overall atmospheric continuity. Circulation emerges not solely from intention but from negotiation among layout, material surfaces, lighting conditions, and bodily habits.

A narrow passage can restrict movement and increase acoustic closeness; an open layout blurs boundaries while allowing for thermal and sound dispersion.

This design thus distributes environmental variations horizontally, influencing how atmospheres stabilize or change.

Agency arises from the interaction of partition geometry, surface reflectivity, air movement, sound propagation, light diffusion, and user occupation patterns.

Together, section and plan reveal architecture's potential to mediate environmental relations across both vertical and horizontal dimensions. The section emphasizes climatic layering and atmospheric stratification; the plan foregrounds occupation, circulation, and boundary negotiation. Neither is a passive representation; both function as operative tools that stage, channel, and enhance the dynamic interplay of matter, climate, technology, and inhabitation.

In this interpretive approach, the section and plan do not merely describe space; they can be understood as co-producing it through emergent interactions.

III. Infrastructure as Operative System

Infrastructure is often understood as a hidden technical base that is neutral, functional, and subordinate to architectural form. Yet, through the interpretive lens adopted in this research, infrastructure operates as a spatial actor: an active participant in the production and transformation of environments. It mediates flows of water, energy, waste, and information, continuously shaping spatial conditions beyond direct human intention.

To exemplify this, consider a simple scenario at the urban scale (see Figure 22). In an old urban fabric, a clogged sewer line after heavy rainfall, causing water to flood the streets, would be interpreted from a traditional perspective as merely a human-caused maintenance deficiency.

However, from a posthuman agency perspective, this situation illustrates how material conditions can be seen as contributing to the reconfiguration of urban space through distributed interactions.

The cumulative relationships between the pipeline, plastic waste, rainwater, soil, and urban surfaces lead to an unexpected rearrangement of space. The overflowing water expands cracks in the pavement, creating temporary flow paths and altering how public spaces are utilized. In this process, material conditions contribute to the reconfiguration of urban space through distributed interactions.

In this sense, infrastructure is not passive support but an operative system whose material behavior participates in spatial production. Within this analytical framework, agency is understood as distributed across pipes, debris, rainfall, and built surfaces, collectively reshaping the urban experience.

Figure 22. Diagram Illustrating Active Matter in the Urban Fabric, created by the author.

Within this analytical framework, the agency of matter foregrounds architectural space not as a static object, but as a process continuously constituted through intra-actions between human and other-than-human entities. Matter is thus no longer understood as an inert backdrop; rather, it emerges as a constitutive component that simultaneously shapes atmospheric qualities, temporal transformations, and modes of engagement.

From an interpretive perspective, this viewpoint enables architecture to be positioned as a relational interface, one in which material, bodily, and environmental forces collectively contribute to the emergence of spatial experience. Accordingly, agency is not located in a singular subject but emerges across a network of relations, providing the conceptual ground for the notion of distributed agency explored in the following sections.

The positions discussed above are not treated as a unified doctrine, but as complementary lenses that illuminate different dimensions of interconnectedness within the built environment. This research explores how certain posthumanist and animist frameworks allow us to read and analyze architectural experience in non-anthropocentric ways.

4.3 Material Vitalism in Architectural Context

Having established the agency of matter, this subsection examines its temporal and material dimensions, often described in the literature as a vitalist perspective. Particular attention is given to processes such as patina formation, weathering, and ecological interaction, through which materials undergo gradual transformations over time. These processes allow architectural space to be understood not as a fixed product but as an evolving field shaped through ongoing material and environmental interactions**.**

In this subchapter, we explore the concept of material vitalism within the context of architecture. We examine how the agency of materials influences atmosphere, building elements, and spatial experiences. We aim to question anthropocentric design paradigms and reposition architecture as a collective formation emerging through both human and non-human processes.

Here, agency is understood as an analytical category, referring to the relational capacity of entities to produce effects through interactions with other elements, including time, environment, and human practices (Latour, 2005; Descola, 2013).

This theoretical lens offers a critical reconfiguration of how matter is understood within architectural discourse. Material vitalism can be interpreted as a relational field shaped by both human and non-human processes, including wind, humidity, rust, moss, light, and the human body. This perspective challenges anthropocentric design by suggesting that space is not created solely for humans but emerges through interactions between human and non-human processes. While this approach resonates with animistic sensibilities, it does not ascribe inherent subjectivity or intentionality to materials. Instead, it emphasizes their capacity to participate in change, persistence, and transformation within specific contexts**.**

This approach allows us to reframe animism can be reframed as an architectural sensitivity grounded in material processes and lived experience rather than symbolic belief. Architecture is no longer approached as a static composition of passive elements but as a dynamic field in which materials, atmospheres, and built elements contribute to the production of spatial experience through their material and environmental interactions.

The Agency of Materials Over Time: A Timeline Analysis

Within material vitalism, the agency of matter is not limited to instantaneous interactions; it also unfolds over extended periods. In this context, an "agency timeline" has been developed to compare the aging processes of materials such as wood, natural stone, concrete, and copper (see Figures 23 and 24). The timeline compares the materials' initial state (new), their condition after five years, and their mature patina after twenty years.

The aim is to demonstrate how each material's relational capacity can be understood as emerging differently according to its specific properties and environmental interactions, underscoring the active role of time in these processes.

Wood (such as cedar or oak) is initially smooth and fresh with golden-brown tones; within five years, UV rays and moisture transform it into a grey-silver patina, cracks and resin traces becoming apparent. After twenty years, deeper veins, fissures, and resin marks emerge as traces of prolonged environmental interaction, reflecting the material's history of engagement with its surroundings.

Natural stones (such as granite and limestone) begin with sharp edges and a glossy surface; over time, micro-cracks and surface dulling appear. Within twenty years, moss, organic patina, and color softening demonstrate the stone's capacity for ecological interaction.

In his ethnographic study of Ojibwa beliefs, Hallowell shares an intriguing moment when an elder was asked, "*Are all the stones we see around us here alive*?[11]" The elder took a long time to think before responding, "*No! But some are*" (Hallowell, 1960, p. 24).

This qualified, context-specific answer, as interpreted by Hallowell, demonstrates that, in Ojibwa ontology, animacy or personhood is not universally attributed to all stones (or to matter in general). Rather, certain stones may exhibit animate properties or relational capacities only in specific circumstances, as observed in interactions, experiences, or cultural testimony. The

[11] This quotation is not used to claim that stones are literally alive, but to indicate that in some cultural contexts, stones can be understood and attributed as living beings. The example is cited to illustrate a particular animist worldview rather than to assert an ontological claim.

sample is employed here not to affirm any ontological claim about the inherent vitality of stones, but to illustrate an alternative cultural framework in which agency is understood as radically relational and context-dependent, emerging through situated interactions rather than as a fixed attribute of matter. This supports the thesis's analytical use of agency as a lens for rethinking architectural materiality, without endorsing the Ojibwa worldview as empirically true or universally applicable.

Concrete, in its new state, is grey and smooth. It initially hardens through hydration reactions; over time, carbonation and environmental exposure alter its surface, producing cracks, mineral traces, and occasional biological growth.

Copper begins with a bright red-orange; within several years, oxidation transforms it into brown-black, eventually forming a blue-green patina over long periods. This well-documented chemical process can be interpreted as a form of material responsiveness, through which the environmental exposure occurs through chemical and atmospheric processes.

The comparative timelines (see Figures 23 and 24) reveal distinct patterns: the slow geological transformation of stone contrasts with the more rapid organic changes of wood, while industrial materials such as concrete and copper follow their own temporal trajectories. When considered together, these examples demonstrate how time modulates material interactions. Patina, in this sense, can be understood not merely as an aesthetic outcome, but as a visible trace of ongoing material–environment relations.

Such temporality is not confined to controlled or contemporary contexts; it also characterizes long-term geological and cultural formations, further reinforcing the importance of time in shaping spatial and material experience.

Figure 23. Sketch Illustrating the Relational Agency, created by the author.

Figure 24. Sketch Illustrating the Relational Agency, created by the author.

The fairy chimneys of Cappadocia are geological formations created by the accumulation of tuff and volcanic materials ejected by the Erciyes, Hasan, and Gollu mountains volcanoes during the Late Miocene–Pliocene period. Over millions of years, wind, rain, stream erosion, and freeze-thaw cycles have transformed these soft tuff layers into conical columns (see Figure 25). The harder basalt or ignimbrite layer above slowed erosion while allowing the underlying tuff to erode more rapidly, resulting in the characteristic form of the fairy chimneys.

This long-term transformation can be interpreted through a relational perspective, in which geological processes, climatic conditions, and material properties interact over extended durations. In this sense, the formation of the fairy chimneys can be analytically described through processes comparable to what Barad defines as *intra-action,* where material configurations emerge through reciprocal interactions rather than through isolated causes.

Figure 25. Fairy Chimneys, Goreme, Turkiye, photograph from Pixabay Content License under free for use.

Human interventions have become entangled with these ongoing geological processes. Roman-era Christian communities, as well as earlier settlements, carved houses, churches, monasteries, and underground cities such as Derinkuyu and Kaymaklı into the soft tuff layers. Erosion, biological growth, cracking, and contemporary tourist use continue to modify these formations over time. Rather than static objects, the fairy chimneys may therefore be understood as material environments undergoing continuous transformation through the interaction of geological, ecological, and human processes.

Such temporal processes are evident in contemporary architectural projects that deliberately incorporate weathering materials, exemplified by the Hokkaido Centennial Memorial Tower (1970, designed by Ken Iguchi) in Nopporo Forest Park, Sapporo, Japan.

Figure 26. Hokkaido Centennial Memorial Tower, 1970, source from Nippon Steel.

The tower's exterior cladding was made of weathering steel, also known as Corten steel, which was intentionally left unpainted to develop a protective patina through oxidation. Initially, the surface was bright orange, but over the decades, it gradually transformed into deeper brown and russet tones due to prolonged exposure to the harsh Hokkaido winters, including snow, wind, and moisture. This process allowed for the formation of a stable protective layer.

Although the tower was demolished in 2023 due to maintenance and safety concerns, its approximately 50-year lifespan illustrates how architectural elements can be designed to interact with ongoing material changes.

Patina, rather than being understood as a flaw, can be read as visible evidence of steel's interaction with time, climate, and environmental conditions. In this sense, the gradual transformation of the material does not merely alter the surface of the structure but contributes to the formation of the tower's architectural identity over time.

In an architectural context, such transformations allow materials to be understood not as passive tools but as relational contributors to spatial experience. Concrete, for instance, not only bears loads but also undergoes chemical processes such as hydration and carbonation that gradually alter its surface and structure, while embedded reinforcement may corrode under certain conditions, producing visible traces of temporal exposure.

Similarly, wood interacts with environmental conditions through the visibility of growth rings and surface textures, while the release of resin may contribute to the sensory qualities of space. Wood expands and contracts in response to variations in humidity, temperature, and light, subtly affecting how spatial conditions are experienced over time.

As Ingold indicates: "This tangle is the texture of the world. In the animic ontology, beings do not simply occupy the world, they inhabit it, and in so doing – in threading their own paths through the meshwork they contribute to its ever-evolving weave" (Ingold, 2011, p.71). Read in an analytical sense, material transformation can be interpreted as part of a relational field in which time, environmental conditions, and material processes remain dynamically entangled.

Consequently, materials can be understood as exceeding their conventional role as static elements shaped solely by architectural intention; rather, they function as responsive material processes whose properties, including texture, weight, sound, smell, and thermal behavior, contribute to the production of spatial experience.

Each material develops its own temporal pattern of transformation in space, shaped through ongoing interactions with environmental conditions and human use.

4.4 From Human-Centered to Distributed Agency

"*But the posthuman does not really mean the end of humanity. It signals instead the end of a certain conception of the human*"

— N. Katherine Hayles,1999

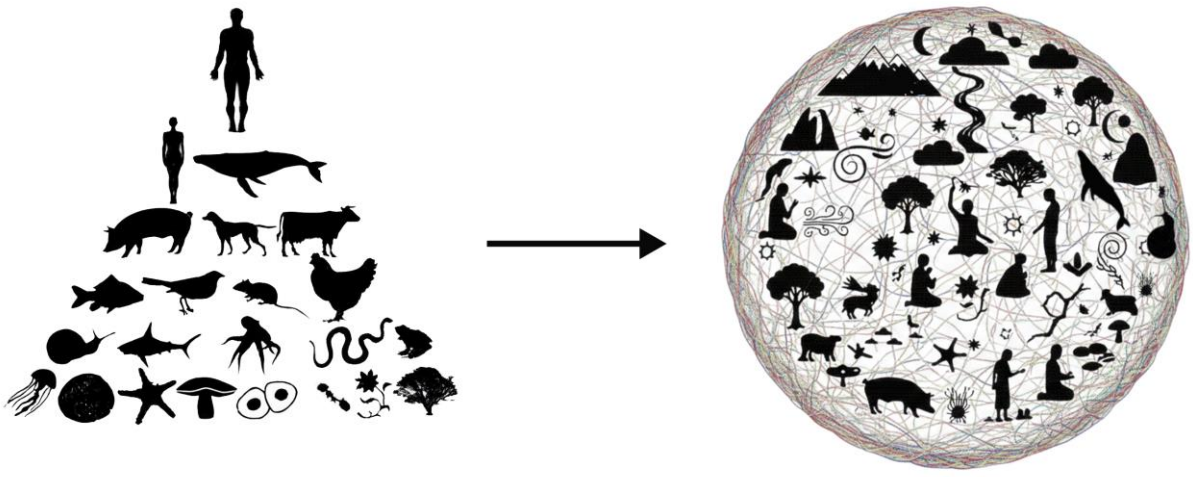


Figure 27. The shift from Ego-centric to Eco-centric understanding. Redrawn by the author, adapted from Lehmann (2019).

With matter understood as interdependent and temporally dynamic, agency can no longer be confined solely to human intentionality. This subsection traces the theoretical shift from anthropocentric models toward distributed agency, demonstrating how architectural production can be interpreted as emerging through networks of interactions among human and other-than-human processes. Within this analytical structure, agency is approached as a networked condition rather than a property belonging to individual actors.

This shift from anthropocentric to distributed agency reflects a broader epistemological transformation in contemporary theory. In conventional architectural discourse, agency is typically defined as a "capacity to act" attributed to a conscious subject, such as the architect or the user. This Cartesian logic positions the built structure as a passive object, while assigning meaning and action exclusively to the human individual.

Posthumanist discourses, however, reinterpret agency as an associative and systemic process. From this interpretive lens, agency does not originate from a single center but can be understood as emerging through assemblages composed of both human and other-than-human actors.

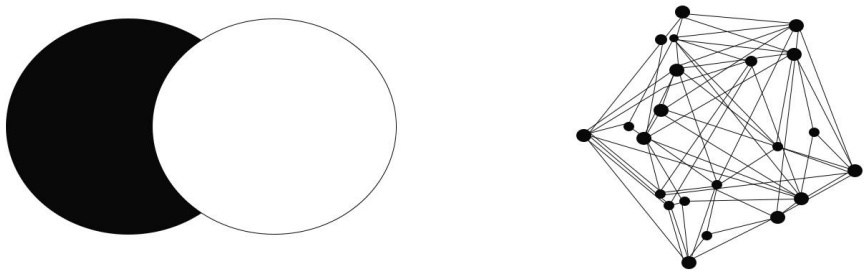
Space as Co-Production:

The theoretical grounding of distributed agency can be traced to Karen Barad's concept of intra-action. In contrast to the classical notion of interaction, which presumes exchanges between pre-existing entities, intra-action refers to the emergence of entities through associative processes. From this interpretive lens, agency is not treated as an individual attribute but as a co-constitutive field in which both human and material components participate in shaping one another.

Jane Bennett's notions of vibrant matter and thing-power further support this position by suggesting that material configurations can generate effects without requiring consciousness or intentionality. Within this methodological structure, agency is not understood as something exercised by discrete actors within a pre-given space; rather, it can be interpreted as emerging through the interdependent configurations that also participate in the formation of spatial experience.

This agency operates through relational processes rather than a linear cause-and-effect model. In this context, Bruno Latour's Actor-Network Theory (ANT) provides a compatible analytical framework. ANT defines an actor (or actant) broadly, encompassing both human and non-human entities. Rather than attributing intrinsic intentionality to non-human participants. Rather than attributing intentional agency to non-human actors, Actor-Network Theory proposes a symmetrical mode of description in which both human and non-human actants are treated as participants in the production of action (Latour, 2005). Latour explains how the concept of network transcends spatial divisions as follows:

"Inside/outside: the notion of network allows us to get rid of a third spatial dimension after those of far/close and big/small. A surface has an inside and an outside separated by a boundary. A network is all boundary without inside and outside" **(**Latour, 1996, p. 372**)**.



Inside / Outside Network Relations

Figure 28. Diagram of Actor-network Relations. Redrawn by the author, adapted from Latour (1990/1996).

Latour argues that the concept of a network transcends conventional spatial dualities, such as inside/outside or big/close, redefining space as a structure composed of relational boundaries. From this perspective, architectural form can be interpreted as continually reshaping the network of relationships it inhabits.

Modern architectural practices that incorporate material agency and biological processes exemplify this distributed understanding of agency in space.

Within this theoretical context, architect and designer Neri Oxman developed the concept of "*material ecology*"[12] to describe a design approach that views material, structure, and environment as interconnected systems rather than as separate elements. Within this framework, architectural form is not simply imposed onto materials; instead, it emerges from a continuous interaction between computational processes, biological behaviors, and environmental conditions.

This relational logic is enacted at an architectural scale in Neri Oxman's *Silk Pavilion* (2013). In this project (see Figure 29), 6,500 silkworms spun silk threads across a hexagonal frame, guided not by a traditional human blueprint but by the instincts of the larvae, the geometry of the scaffold, and the surrounding light. In this assemblage, agency is distributed across biological behavior, material properties, and computational constraints. The pavilion is not merely a designed object; it is a co-produced artifact in which the tensile properties of silkworm silk and human-engineered constraints interact to create an emergent form that is lightweight, translucent, and biomimetic.

This blurs the distinction between the builder and the built environment, resonating with Timothy Morton's concept of the "mesh" (2010) from Chapter 2.1, where life and non-life are intertwined without a hierarchical structure.

Ultimately, the agency arises not from the architect's individual will. Instead, it emerges from the dynamic relationships among humans, robots, insects, materials, and the environment.

[12] Oxman et al., "Material Ecology," 2015, https://doi.org/10.1016/j.cad.2014.05.009.

Figure 29. Silk Pavilion, Neri Oxman, 2013: an experimental pavilion in which silkworms actively participate in the biological fabrication process.

The Moss Columns project (2024) by Yong Ju Lee, provides a notable contemporary example of distributed agency in architectural production, where living organisms actively participate in the co-production of architecture. This prototype series (see Figure 30) explores integrating living moss into artificially constructed structures, treating the plant not merely as a decorative feature but as an active contributor to architectural design (Lee, 2025).

Figure 30. Moss Column I in 1:2 scale, photograph by Yong Ju Lee,[13]2025.

The columns are designed using computational algorithms based on reaction-diffusion (RD) systems. These mathematical models simulate natural processes such as growth, diffusion, and organic decomposition. The algorithms create complex vertical shapes that improve conditions for moss adhesion, moisture retention, and overall growth. The fabrication process employs advanced robotic 3D printing techniques, such as Fused Granulate Fabrication (FGF). Grooves and subtracted patterns are strategically incorporated into the structure to allow moss to take root and thrive without compromising structural integrity.

[13] From Lee (2025). Licensed under the Creative Commons Attribution 4.0 International License. Original source: https://doi.org/10.1007/978-981-96-3433-0_11.

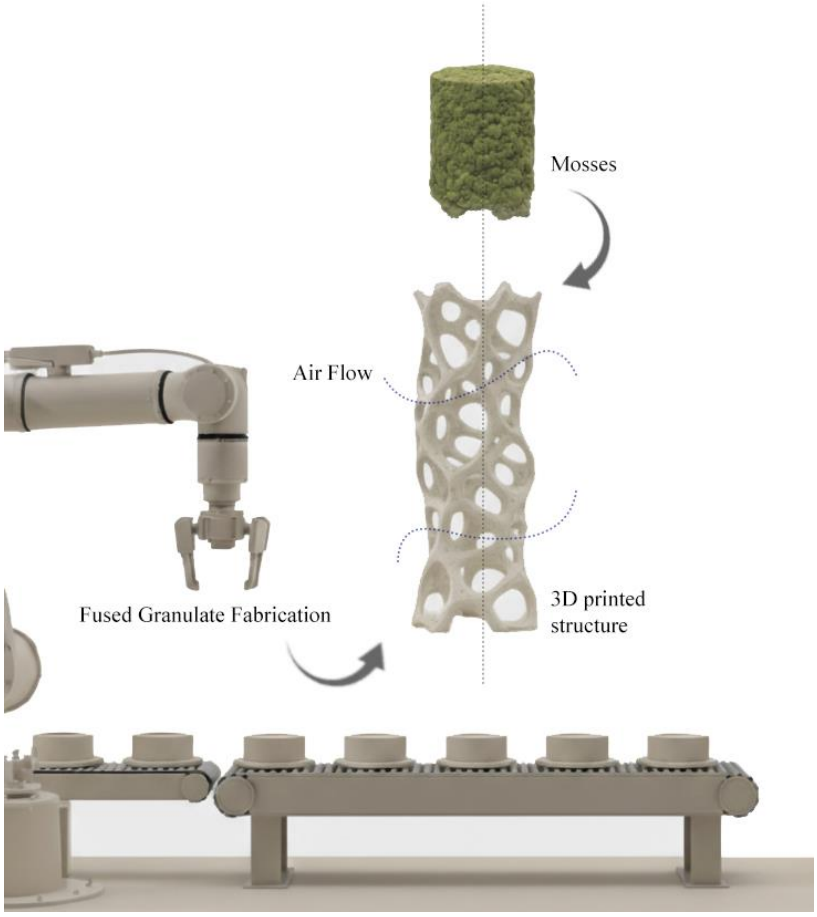


Figure 31. Diagram of the Creation Process, created by the author.

The final form is not determined solely by human or computational intent. Instead, it emerges through continuous interactions among various factors: the digital design constraints, the material properties of the printed substrate, and environmental conditions such as light, humidity, and air circulation. Additionally, the biological agency of the moss plays a crucial role, influencing its growth patterns, photosynthetic processes, and symbiotic exchanges with the surrounding atmosphere.

A personal exploration of distributed agency in spatial co-production is evident in my undergraduate project, an amphibious performative structure designed for a flood-prone slope adjacent to a water body. The design features modular, shredded volumes that settle on the ground in dry conditions but rise collectively as water levels rise through a buoyant foundation system incorporating floating concrete pontoons, telescopic arms, and lifting force barrels.

Agency here is profoundly relational and emergent: the water level acts as a non-human actant that intra-acts with the structure (Barad), exerting buoyant force to elevate the volumes without human intervention.

The telescopic direction poles and caisson foundations maintain alignment, while the polyethylene-coated floating floors and reinforced concrete elements contribute thing-power (Bennett), enabling the space to adapt dynamically (see Figure 32 for structural diagram).

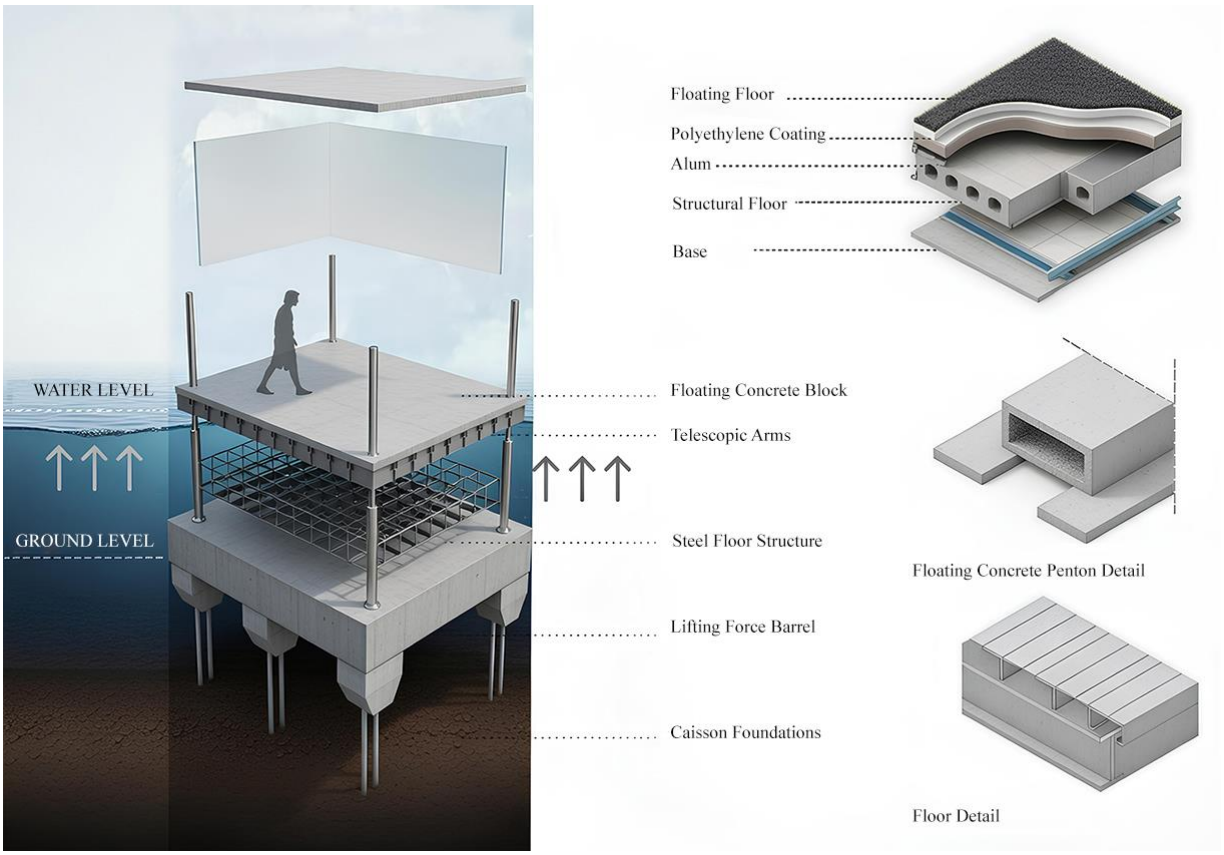


Figure 32. Structural Diagram of the Amphibious House Project, 2021, created by the author and Supervisor Türker Keskin.

Human presence further co-produces the experience as the rising water completes the stage, blurring distinctions between ground, water, and built form. This networked assemblage (Latour) transcends traditional inside/outside binaries, as the structure becomes all-boundary: a relational mesh of gravity, ability to float, material constraints, and environmental cycles.

The project demonstrates how architectural form can emerge from continuous entanglements rather than from fixed impositions, aligning with material ecology principles in which structure, environment, and agency co-evolve.

In Neri Oxman's Silk Pavilion project, thousands of silkworms (animals), robotic systems, and human design work together to collaboratively produce the space; in Yong Ju Lee's Moss Columns, moss (plants) are embedded within the robotically printed structure, actively shaping both form and ecological performance through their growth processes. In my own undergraduate project, an amphibious performance structure, an inanimate element, water, takes on a central role: rising water levels, floating concrete pontoons, telescopic arms, and fragmented volumes intervene in intra-action, lifting the structure from the ground, completing the scene, and constantly restructuring the ground-water-human relationship.

As a result, these three analytical readings, animal (silkworm), plant (moss), and inanimate matter (water), demonstrate how distributed agency can be examined across different architectural contexts. In this perspective, space is not approached as a pre-existing, fixed container; rather, it can be understood as a relational field that is continuously produced through interactions among humans, technological systems, biological processes, and environmental conditions.

In conclusion, the analysis presented in this section does not assert an ontological claim of vitality. Instead, it proposes an epistemological reading: approaching architecture from a distributed agency perspective allows us to re-imagine design practice in a more responsible, sensitive, and interconnected way. Thus, space is no longer approached as merely the product of human intention; instead, it can be understood as emerging through ongoing processes of co-configuration involving both human and non-human participants.

4.5 Distributed Agency in Built Elements

Having explored distributed agency in theoretical terms, this subsection applies the concept to concrete architectural elements such as walls, facades, thresholds, floors, and stairs. The analysis examines how these components contribute to the co-production of spatial experience through their material properties and their interactions with environmental conditions and human practices.

While discussions of distributed agency are often conducted through macro-scale networks and ecological systems. However, examining this concept at the architectural scale provides critical ground insights into how it operates at a smaller, more detailed level, specifically in relation to individual built elements.

Walls, facades, thresholds, floors, roofs, and architectural details are not simply neutral carriers of form; they can be understood as sites where distributed agency becomes perceptible through the interaction of material properties, environmental forces, and bodily practices. From a posthumanist point of view, these elements do not merely interact to human intention but participate in the formation of spatial experience through their material behavior and environmental interactions.

In conventional architectural thought, built elements are typically defined by representational or functional roles: walls enclose spaces, roofs provide cover, facades convey expression, and details resolve construction challenges.

In this framework, the designer holds centralized authority, while materials and elements act merely as passive agents executing predetermined intentions. However, the concept of distributed agency changes this hierarchy by highlighting how built elements actively shape spaces through their interactions with factors such as climate, time, gravity, maintenance practices, and human bodies.

In this direction, a facade cannot be reduced to a mere visual surface, symbolic interface, or climatic barrier. As an assemblage of materials, joints, coatings, openings, and technological systems, it continuously negotiates light, heat, moisture, wind, pollution, and biological growth.

Patina, weathering, staining, and material degradation are not incidental defects or aesthetic by-products; they are perceptible traces of material processes unfolding over time within a field of distributed agency.

The understanding of the facade as an active and responsive whole can also be also observed in technology-supported exterior facades. While these systems are initiated through human design, their agency does not reside in intention alone but emerges through intra-actions with environmental forces, material behavior, and temporal processes.

Figure 33. Dominus Winery, Herzog and de Meuron, 1998, photograph by Orphanjones, licensed under CC BY 2.0.

A clear architectural example of this condition can be found in the Dominus Winery by Herzog & de Meuron (1998). The building's gabion facade, composed of locally sourced stone held within steel cages, functions as a climatic filter rather than a fixed surface, mediating light, air, and heat. Over time, the stones weather, darken, accumulate dust, and host biological growth, gradually transforming both the facade's appearance and its environmental performance. Although initiated through architectural design, these changes unfold beyond human intention, revealing how material aging and temporal processes become integral to the ongoing formation of architectural space.

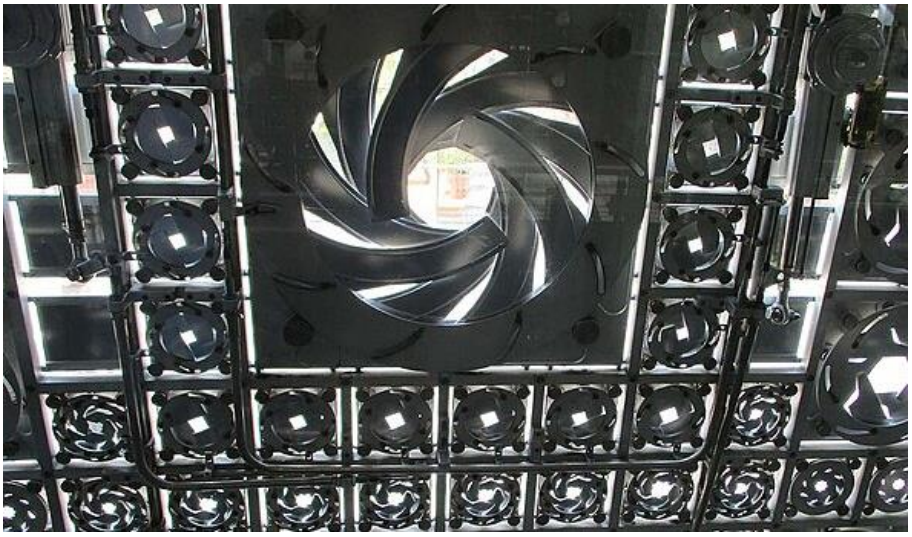


Figure 34. Facade of Institut du Monde Arabe, Jean Nouvel, 1987, photograph by Rictor Norton & David Allen, licensed under CC BY 2.0.

The understanding of the facade as an active and responsive whole can also be observed in technology-supported exterior facades. A seminal example is Jean Nouvel's Institut du Monde Arabe in Paris (1987), where the south facade deploys 240 motorized metallic diaphragms inspired by traditional mashrabiya screens. These iris-like apertures interact with sunlight intensity through sensors and mechanical systems, modulating daylight, heat gain, and interior light patterns. Agency here is distributed across the metal's optical properties, mechanical operations, environmental stimuli, and over time maintenance conditions that have rendered parts of the system static yet still atmospherically performative. This temporal unfolding parallels processes of patina and weathering, revealing how technological facades, like material ones, continue to mediate spatial experience beyond their initial design intentions.

Similarly, thresholds function as concentrated zones of distributed agency. Rather than acting as simple boundaries between inside and outside, thresholds orient bodily movement, hesitation, orientation, and transition. Changes in material texture, temperature, sound, or light subtly guide the body, producing spatial meaning through embodied negotiation. In this sense, the threshold does not merely signify entry; it becomes part of the relational conditions through which spatial experience emerges.

Figure 35. Tomba Brion, Carlo Scarpa, 1978, photograph by Viaggiamocela, licensed under CC BY 2.0.

A quintessential example is Carlo Scarpa's Tomba Brion (Brion Tomb, 1968–1978) in San Vito d'Altivole, Italy, particularly its propylaeum entrance. The asymmetrical concrete portal, pierced by two interlocking circles (vesica piscis symbolizing eternal union), opens onto a water-filled threshold where a mechanical glass door rises from a submerged shaft with bubbling sounds and counterweight mechanics.

This liminal zone negotiates the passage from the mundane cemetery path to the sacred garden through haptic shifts (rough concrete to smooth mosaic and water), acoustic echoes (squeaking metal and dripping water), luminous framing (circles directing views), and bodily deceleration, inducing hesitation and reorientation. Agency distributes across concrete's materiality and patina over time, water's fluidity, mechanical precision, gravitational flows, and the visitor's embodied response, transforming entry into a ritual of reflection on life, death, and duality.

Moving from thresholds to floors, Floors and ground surfaces further exemplify how agency is embedded in architectural elements. Their hardness or softness, smoothness or roughness, thermal behavior, and acoustic properties directly affect posture, pace, and bodily awareness. Over time, wear patterns produced by footsteps, furniture movement, and environmental exposure inscribe collective memory into the surface. These traces reveal how agency is shared

between human use and material resistance, producing a spatial narrative that exceeds intentional design.

Figure 36. Floor Surface at Sluishuis, Amsterdam, photograph by the author.

This distributed condition becomes particularly perceptible where different materials meet. In the surface photographed in Figure 36, the transition from concrete to timber introduces a subtle yet tangible shift in bodily experience. The concrete, firm and thermally inert, stabilizes the body and encourages a steady, grounded pace, while the timber, slightly resilient and acoustically responsive, softens each step and produces a muted resonance underfoot. As the user moves from one surface to the other, posture, rhythm, and tactile awareness are momentarily recalibrated. When exposed to rain, this contrast intensifies: the concrete becomes cooler and more inert, while the timber darkens, absorbs moisture, and alters friction, prompting greater caution and bodily attentiveness. Over time, differential weathering, foot traffic, and environmental exposure inscribe distinct material traces onto each surface, revealing how human movement, climatic forces, and material behavior collectively shape spatial experience. In this way, the floor operates not as a homogeneous ground plane but as a field of distributed

agency, where shifts in material condition continuously reconfigure perception, movement, and bodily orientation.

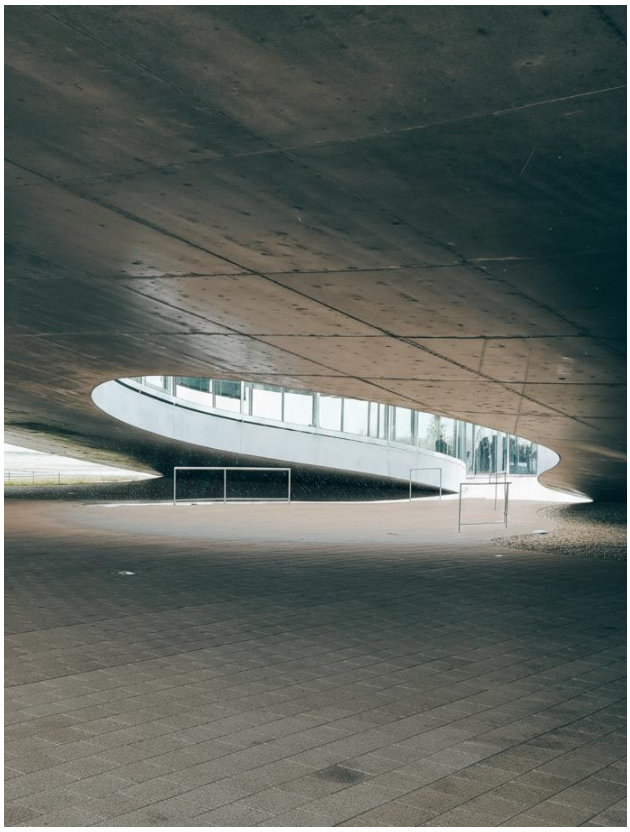


Figure 37. Topography as Floor, Rolex Learning Center, Switzerland, photograph by the author.

A different sample of distributed agency emerges in the continuous ground surface of the EPFL Rolex Learning Center (see Figure 37). Here, the floor is no longer a neutral horizontal plane but a gently undulating topography that subtly guides bodily movement and orientation. The sloped surface recalibrates balance, pace, and muscular engagement, making the body continuously negotiate gravity and inclination. Movement across the space becomes neither fully intentional nor entirely automatic, but modulated by the ground's shifting gradient. The smooth, continuous material reinforces this spatial fluidity, dissolving clear boundaries between circulation, occupation, and pause. Light entering through the large apertures accentuates the curvature of the surface, producing gradients of shadow and illumination that further orient perception. At the library entrance, this spatial modulation acquires a programmatic intensity: the inclined ground gradually slows the body, transitioning movement from circulation to states of pause, attention, and cognitive immersion.

Over time, patterns of use emerge not through localized wear but through zones of intensified movement and gathering, revealing how spatial form, bodily adaptation, and environmental conditions collectively shape experience. In this sense, the floor can be understood as a spatial field in which agency is distributed across geometry, gravity, material continuity, and human movement.

Extending this condition from horizontal surfaces to vertical transitions, stairs further intensify the distributed nature of agency within built elements. Rather than functioning solely as connectors between levels, stairs structure and modulate bodily movement through rhythm, repetition, and material constraint. Built for Expo 58 (see Figure 38), the enclosed stair structure exemplifies how spatial form and material configuration co-produce bodily orientation and tempo. The narrow, tunnel-like section directs movement into a linear and unavoidable trajectory, while the repetitive sequence of steps synchronizes breathing, balance, and pace. Metallic surfaces, cool to the touch and acoustically reflective, amplify the sound of footsteps, transforming ascent into a resonant spatial event. Light, rhythmically distributed along the passage, reinforces the perception of depth and progression, drawing the body forward through a subtle but persistent spatial pull.

The slight wear along step edges registers the accumulation of countless movements, embedding collective presence into the material surface with time. In this way, agency emerges not from a single source but from the continuous negotiation between bodily effort, spatial atmosphere, and material resistance, revealing the stair as an active participant in the production of movement, perception, and spatial experience.

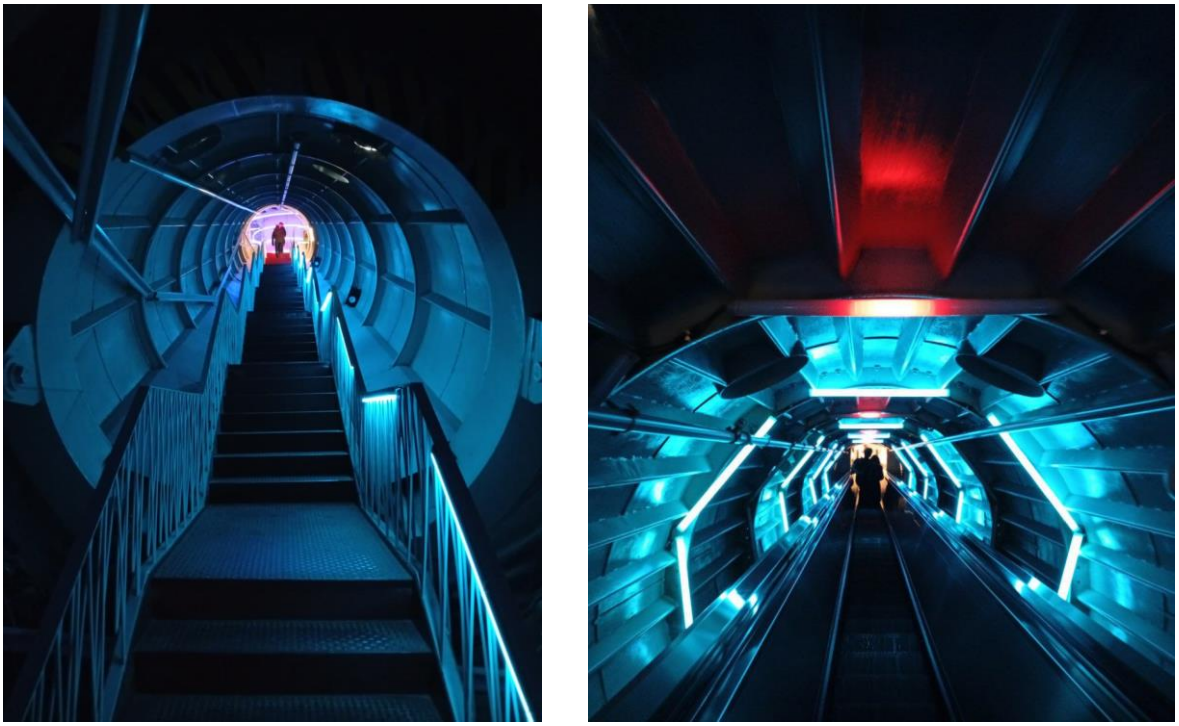


Figure 38. Vertical Circulation Element Stairs**,** Expo 58, Brussels, photographs by the author.

From a Distributed Agency viewpoint, these elements should not be understood as isolated components but as nodes within a relational field. Their agency arises through intra-actions with human bodies, environmental forces, and temporal processes. A wall cracks not simply because it fails structurally, but because of a complex entanglement of material composition, thermal movement, humidity, gravity, and construction logic. Such transformations expose the limits of human control and foreground the performative role of matter in architectural becoming.

This understanding aligns with animist sensibilities without reverting to symbolic anthropomorphism. Built elements are not “alive” in a metaphysical sense, nor do they possess intention or consciousness. Their vitality emerges relationally, through their capacity to affect and be affected. Agency, therefore, is not located in the element itself, but in the network of relations in which the element participates.

By foregrounding built elements as sites of distributed agency, architecture can be rethought as a field of negotiation rather than domination. Design becomes less about imposing form and more about configuring conditions under which material, environmental, and bodily agencies can interact productively. This shift opens a conceptual pathway toward understanding architectural space not as a finished object, but as a continuously evolving assemblage.

This perspective prepares the ground for the following section, in which posthumanist space is explored through the concept of assemblages of becoming. Built elements, when understood as relational actors, reveal architecture as a dynamic process shaped by ongoing interactions rather than static form or fixed meaning.

4.6 Atmospheric Agency: The Phenomenological Intensification of Distributed Relationality

Building on the distributed agency described in built elements, this subsection investigates how these relational processes can be understood phenomenologically as atmospheric agency. Attention is given to the pre-reflective and embodied qualities of spatial experience, through which material and environmental interactions become perceptible as atmospheric conditions shaping human perception and movement.

In this direction, atmospheres emerge not as passive backgrounds or mere human interpretations, but as relational fields where human bodies, non-human entities such as light gradients, air currents, material textures, and environmental flows intra-act (Barad, 2007) to produce pre-reflective, pathic, and resonant experiences (Böhme, 2017; Griffero, 2014).

This perspective integrates complementary theoretical positions rather than a unified doctrine.

Karen Barad's framework of intra-action emphasizes how entities emerge from their relationships. Gernot Böhme's concept of the aesthetics of atmospheres describes these as tuned spaces that encompass a felt bodily presence, which is neither entirely objective nor purely subjective. Maurice Merleau-Ponty's phenomenology of perception, along with neophenomenological contributions such as Tonino Griffero's idea of quasi-things that impact the lived body and Elisabetta Canepa's concept of resonant fields that connect materiality to corporeality and emotional attunement, provide valuable insights into understanding how distributed agency, defined as the emergent capacity to produce effects within assemblages, can intensify into atmospheric effects.

To clarify, the term "agency" in this context is relational and descriptive. It refers to the ability to create atmospheric effects through interconnected interactions within assemblages, rather than implying intentional subjectivity or a quasi-ontological "participation" of non-human elements. This approach avoids suggesting that space acts as an "agent" in a literal sense; instead, it provides an interpretive lens for understanding the emergent effects.

4.6.1 Material Transformation and Atmospheric Agency

"*There are thousand different possibilities*

in one material alone"

— Peter Zumthor,2006

How Is Material Transformation Experienced Atmospherically in Space?

The agency timeline analysis in the previous subsection demonstrates that material transformation through patina, weathering, cracking, oxidation, or ecological integration is not merely a physical or chronological process, but an active dimension of the relational vitality of matter. Instead, it represents an active aspect of the relational vitality of matter. These transformations extend beyond merely affecting functionality or causing aesthetic decline; they also co-produce the atmospheric qualities of architectural spaces by coordinating sensory, emotional, and bodily encounters over time.

Phenomenological approaches provide an essential perspective for understanding atmospheric experiences in architecture. In particular, Peter Zumthor's phenomenological reflections in *Atmospheres: Architectural Environments – Surrounding Objects* (2006) emphasize the atmosphere as a singular, unconventional state of mind or density of presence that emerges from the precise interplay of materials, light, sound, temperature, and proportion. Zumthor defines materials not as inert substances, but as entities possessing internal relational "capacity" and infinite variety.

Peter Zumthor explicitly discusses the patina of age on materials, noting that as materials age, they create a heightened awareness of the passage of time and human presence within a space, resulting in a unique aura (Zumthor, 1998). In this perspective, transformation enhances rather than diminishes the atmosphere. The weathered surfaces of stone or oxidized copper make the building's history tangible and sensory, fostering a deeper connection to the duration and context of the environment.

Zumthor's Therme Vals (1996) exemplifies this process. The local Vals gneiss stone, chosen for its thermal mass and tactile qualities, evolves through subtle color variations, microcracks, and water-induced patina. These transformations do not detract from the intended atmosphere of quiet immersion and sensory resonance; rather, they intensify it. The gradual softening of the stone integrates the building more fully into the Alpine landscape, allowing the occupants to feel the geological continuity alongside human presence. Thus, the material change becomes atmospheric: it attunes the living body to slowness, resilience, and environmental dialogue, and aligns with Zumthor's conception of architecture as a poetic state in which space spontaneously envelops and moves the body.

Figure 39. Therme Vals, Peter Zumthor, 1996, photograph by Architectuul.

This phenomenological insight resonates with contemporary neophenomenological discourse, particularly as articulated in *Atmosphere(s) for Architects: Between Phenomenology and*

Cognition (Canepa, Condia, & Wynne, 2023), where Elisabetta Canepa describes atmosphere as a resonant field, a connection felt in the body that links personal emotions to the environment.

This connection starts with the physical qualities of the built environment but extends beyond these aspects into subjective and emotional realms (Canepa, 2023). Atmosphere is co-constituted by the materiality of space and the corporeality of the perceiving body; it is neither purely objective nor subjective, but emerges in their intersection.

Material qualities and their transformations play a pivotal role in generating this resonance: the tactile and sensory affordances of surfaces, such as rough or velvety textures, warm woods versus cold metals, fluid or viscous substances, or the evolving character of materials over time, invite specific bodily attitudes and attunements. Canepa emphasizes the importance of adopting a multi-perspective approach that integrates phenomenological self-observation with neuroscientific external measures to capture the complexity of atmospheric experience, including complementary notions such as resonance and attunement, lived body and living body, conscious and nonconscious, emotions and feelings (Canepa, 2023). She also points out that “even if the atmospheric aura is not instantly perceivable, we cannot separate architecture from it” (Canepa et al., 2019, as cited in Canepa, Condia, & Wynne, 2023, p. 11).

A compelling example of this dynamic appears in Han Tumertekin's B2 House (2001, Buyukhusun Village, Canakkale, Turkiye), a minimalist residence that was awarded the Aga Khan Award for Architecture in 2004.

The house integrates handcrafted local stone with concrete. The stone is hand-cut and laid by local stonemasons in close collaboration with the architect, maintaining the natural irregularities in shape, grain size, joint depth, and masonry texture. Over time, the stone weathers and becomes part of the terraced landscape, demonstrating a sort of temporal agency. The materials co-produce climatic comfort, establish spatial hierarchies, such as the distinction between service areas and living zones, and foster a sense of atmospheric belonging through their interrelated properties and environmental connections, rather than being imposed solely under human control.

Figure 40. Raw Concrete and Handcrafted Stone Facade, Han Tumertekin, 2001, source: Aga Khan Trust for Culture.

Phenomenologically, the B2 House engages the body in a pre-reflective, sensory experience akin to Therme Vals. Occupants are invited into a calm, suspended mode of presence: the rough, tactile stone surfaces and the thermal mass of concrete encourage pauses at thresholds, slow, measured walks along the extended balcony, and an intimate attunement to the panoramic Aegean landscape and its seasonal rhythms.

In this descriptive framework, the B2 House demonstrates how material transformation enhances atmospheric agency as emerging relational effects, increasing awareness of time and presence in space.

Tonino Griffero's neophenomenological framework adds further depth. Griffero conceptualizes atmospheres as quasi-things, autonomous forces that act upon the lived body from outside, often involuntarily and in a pathic manner (Griffero, 2014). These forces are neither conventional objects nor discrete events; rather, they operate as independent powers that confront perception and provoke immediate, bodily responses.

To clarify this, quasi-things can be understood as relational experiential fields that emerge in everyday situations, such as the tense atmosphere of a space, the warmth in a room, the melancholy evoked by music, or the collective excitement in a crowd. These phenomena are not tangible objects like tables or chairs, but they also cannot be reduced to purely subjective states or dismissed as merely "personal feelings." Rather, they arise through the interaction between environmental conditions, material settings, and bodily perception.

Evolving material surfaces function similarly. Elements such as patina or cracks should not be understood as passive material properties but as expressive entities that actively manifest themselves and elicit direct, felt bodily reactions. Over time, these immediate effects shift from momentary emotional responses to more sustained atmospheric moods. The initial impact of a newly formed surface gradually gives way to the deeper and more persistent resonance of its aged condition. As Griffero emphasizes, the effectiveness of quasi-things lies in their vagueness, since their indeterminate boundaries and inherent ambiguity allow them to permeate perception more strongly and create immersive experiences.

In the context of material vitalism adopted in this study, the atmospheric effects of material transformation are understood as relational and process-based. Materials do not create the atmosphere alone; rather, they do so through their continuous interaction with the environment, time, and human presence. Patina can therefore be read as a visible trace of temporal transformation, revealing how material processes unfold over time and how they become perceptible to the body. In this sense, atmosphere is not treated as an autonomous entity, but as a dynamic process continuously shaped through relational interactions.

In this research, quasi-things are not considered autonomous beings or intentional agents. Instead, they function as analytical concepts that help describe relational fields of experience emerging from the interaction between material transformation, environmental conditions, and embodied perception.

4.6.1 From Atmospheric Agency to Ritual Repetition

Is it only the human body that performs the ritual, or does the space "demand" this repetition?

The transition from atmospheric perception to ritualized action marks the point where distributed agency can be understood as a directive relational force. If, as previously established, atmospheres are described as "resonant fields" (Canepa, 2023) or "quasi-things" (Griffero, 2014) that affect the lived body, the question arises whether ritualized behavior emerges solely from human intention or from the stabilizing influence of spatial and atmospheric conditions that encourage repetition.

In this framework, ritual is not approached through a purely sociological lens as a symbolic human tradition, but rather as a spatial-material performance emerging from the interaction between bodily practices and environmental conditions. Ritualized actions can thus be understood as co-produced through the relational configurations of space, material settings, and atmospheric qualities.

Within this perspective, atmospheric agency refers to the capacity of spatial conditions to orient and stabilize recurring patterns of movement and pauses, without implying intentional direction or control.

Spatial Orientation and Ritual

When a material setting achieves a certain atmospheric density, such as the silence of the Therme Vals or the threshold-intensive layout of the B2 House, spatial conditions can be understood as providing a non-human framework that orients bodily behavior.

The apparent “demand” for repetition should not be understood as the result of an intentional directive. Rather, it can be more cautiously interpreted as arising from the relative stabilization of relational conditions that gradually emerge through the ongoing interaction between spatial configuration, sensory perception, and bodily movement.

According to Merleau-Ponty's notion of the body-subject, ritualized behavior does not result solely from conscious decision-making. Instead, it emerges from the pre-reflective interaction between bodily perception and material conditions. In the B2 House, for instance, the act of pausing at the stone threshold to gaze at the Aegean Sea can be understood not just as an individual choice but as a bodily response shaped by the tactile roughness of the stone and the way the landscape is framed.

In this context, we may describe ritual as the gradual stabilization of atmospheric effects: the moment when a pre-reflective encounter evolves into a recurring pattern of interaction between the body and its material surroundings.

Ritual, therefore, is not merely repetition, nor solely symbolic performance; it is the temporal consolidation of relational orientations between body and environment.

As these actions are repeated, they become sedimented both in bodily habit and in spatial experience. Ritualized movement reinforces the perceptible atmospheric qualities of the environment, creating a reciprocal stabilization between spatial conditions and patterns of inhabitation. From this perspective, the agency of space does not refer to intentional action; rather, it denotes the capacity of relational spatial conditions to support recurring bodily orientations over time.

The tendency toward repetition can be understood as emerging from the interplay between:

Spatial Affordances: The physical layout, such as narrow corridors, heavy doors, or light-filled niches, structures the range of possible movements and bodily positions.

Sensory Anchors: The placement of materials and textures, the coldness of stone, or the warmth of a sun-exposed concrete bench establishes perceptual reference points that guide bodily orientation and pauses.

Temporal Rhythms: Temporal variations such as the movement of shadows across textured surfaces or the rhythm of dripping water can create perceptible patterns that support recurring modes of inhabitation.

From this perspective, ritualized interaction with space can be understood not only as a phenomenological condition but also as a conceptual bridge toward animist modes of thought. In animist cosmologies, the environment is not treated as a passive background but as a relational field within which humans establish repeated patterns of engagement. Ritual repetition stabilizes these relationships and gives them cultural continuity. Rather than interpreting animism narrowly as a belief in the inherent, independent agency of inanimate matter, it can be more productively understood as a cultural articulation of relational spatial experience, one in which forms of personhood and agency are relationally constituted through ongoing interactions within a more-than-human environment.

In many Shinto contexts, this relational condition is embodied in the sandō, the sacred approach path leading from the torii to the inner shrine. Pilgrims and regular worshippers repeatedly follow this route during festivals (matsuri), seasonal visits, or daily devotion, walking along gravel or stone in measured steps and pausing at lanterns or sacred trees (Van Goethem, 2019). Through repetition, bodily movement becomes coordinated with environmental rhythms such as shifting light, seasonal change, and the movement of wind through surrounding vegetation. Over time, these repeated traversals stabilize the path as a recognizable field of interaction, where bodily habits and material conditions gradually become intertwined.

Figure 41. Shinto Shrine Gateway, Japan, 2024, photograph adapted from Halil Fatih Cetin.

Figure 42. Incense Ritual Forming a Shared Sensory Atmosphere, Japan, photograph by Tobias Karnbach, 2025.

Comparable patterns can be observed in other animist traditions. Although these practices emerge from distinct cosmologies, they share a common emphasis on movement as a way of sustaining continuity between body, memory, and landscape. Through walking, singing, or rhythmic motion, the environment is not merely traversed but continually re-activated as a living field of interaction.

Australian Aboriginals and "Songlines"(Abram, 1996). In Aboriginal culture, Songlines, also known as "Dreaming" routes, function as both maps and rituals. By singing specific songs while physically walking these routes, people connect with the land, mythology, and ancestral heritage. Walking here is not merely a way of moving from one place to another; it is a bodily act of re-enacting the creation of the world.

Native American Traditions and Ritual Dance. Many Indigenous peoples of North America, such as the Pueblo or Navajo (Abram, 1996), establish a profound physical bond with the land through specific ritual dances and sacred processional paths. The rhythmic striking of feet against the earth is seen as a way to synchronize one's pulse with the heartbeat of the land. Through this embodied practice, the sense of separation between humans and their environment is diminished, and the field of interaction is re-stabilized.

Not only in North American Indigenous traditions, but also in South American Indigenous cosmologies, embodied ritual practices serve as ways of attuning humans with the living land. Relational cosmology can also be observed among Indigenous communities of the Andes region, particularly in present-day Peru and Bolivia.

Figure 43. Andean Indigenous Musicians, 2019, photograph by the author.

In Andean musical practice, especially in communal performances of the siku (pan flute), sound is not merely an aesthetic expression but a medium of ecological relation. Breath, sound, and rhythm function as mediators between human communities, the sacred mountains (apus), and the living landscape personified as Pachamama (Mother Earth).

This relational understanding of landscape was not limited to musical practice but was also spatially structured in the ritual organization of the Andes.

The Incan "Ceque" of the Andes: The Inca practiced a system of ceques, invisible ritual lines radiating from Cusco toward sacred sites (huacas) in the landscape. Periodic pilgrimages and offerings along these lines required specific movements and temporal rhythms. These repeated

traversals integrated social memory with ecological cycles, turning the mountainous geography into a living, interactive participant in communal life.

In these cases, ritual walking does not simply symbolize a belief system but stabilizes ongoing relationships between body, environment, and terrain.

A comparable pattern of ritualized spatial interaction can be observed in contemporary architectural contexts, such as the Sancaklar Mosque (camii). Here, the spatial configuration, material choices, and lighting conditions subtly guide the movement and pauses of visitors and worshippers. Narrow entrance corridors, the gradual unfolding of interior volumes, and carefully modulated natural light create sequences of orientation and reflection, encouraging pre-reflective attentiveness without implying intentional direction from the building itself.

Figure 44. Sancaklar Mosque, Emre Arolat, 2013, photograph adapted from Halil Fatih Cetin.

Repeated visits or daily prayers allow bodily practices to stabilize within the architectural setting, creating a patterned engagement with space that resonates with the relational principles

observed in Shinto sandō paths. Thresholds, transitions between open courtyards and enclosed prayer halls, and tactile encounters with stone surfaces all function as relational nodes through which the body, materiality, and environmental conditions co-produce meaningful spatial experience.

In sacred architectures, where prayer, contemplation, or devotion unfold as cyclical acts, the physical environment does not intentionally command repetition; rather, it intensifies and stabilizes relational conditions that make repetition likely and experientially coherent. In this sense, spatial agency can be understood not as directive will, but as the capacity of material and atmospheric configurations to sustain recurring bodily orientations over time, blurring the boundary between human gesture and the agency of space without attributing autonomous intention to the built environment.

This capacity is not limited to sacred or ritualistic spaces; it operates similarly in everyday, ordinary situations, where rituals occur with less awareness. In a school building, students entering through the same door each morning walk through the corridors in a certain rhythm, heading to their classrooms when the bell rings or gathering in the same courtyard during recess. For example, when a stone floor is uneven, bodily movement becomes more attentive: one looks down and slows one's pace to maintain balance. The inclination of the body that results from this adjustment may resemble a slight bow, not as a symbolic gesture but as a bodily response to material conditions.

They are guided by spatial affordances such as narrow corridors, the sound of the bell, and the layout of the classrooms, as well as sensory anchors, including the texture of the floor, changes in light, and door thresholds. Over time, these repetitions become pre-reflective: the body adapts to the rhythms established by the space without conscious thought. The school thus quietly reinforces the daily "school ritual," creating a habitual relationship between the body and the environment.

This is evident not only in sacred or public architecture but also, perhaps most intensely, in the most familiar and ordinary environment: the home.

Domestic space is where daily rituals become most deeply sedimented, as the body interacts pre-reflectively with spatial affordances, sensory anchors, and temporal rhythms, gradually forming habitual patterns of engagement. While these repetitions might not always be

consciously identified as "ritual," they create a relational spatial experience that aligns with Maurice Merleau-Ponty's ideas about the body-subject and habit.

The threshold within the home provides a particularly clear example. The entrance door becomes a point of passage where actions are repeated over and over: opening the door, pausing to remove shoes, placing personal belongings in familiar places, or momentarily adapting to the indoor atmosphere.

These gestures are not merely practical actions, but repetitive bodily responses that gain stability through spatial conditions. The weight of the door, the sound of the hinges, subtle changes in air temperature, or the tactile transition from the exterior pavement to the interior flooring can slow down bodily movement and create pre-planned pauses. Over time, the threshold functions as a relational node where the boundary between body and dwelling is established through habit. Entering the home stabilizes not only a physical transition but also a shift in orientation toward familiarity and belonging.

Similar processes occur through repetitive paths within the home itself. Daily movements walking from the bedroom to the kitchen in the morning, approaching the coffee maker via familiar routes, or switching on the lights in a habitual sequence, gradually reinforce a stable relational space between body and environment. These patterned interactions emerge through the interplay of spatial order, material textures, and temporal shifts: narrow corridors direct movement, furniture arrangements structure bodily orientation, and changing lighting conditions or background sounds provide perceptual foundations. As habits form, the body reacts without reflective decision-making, demonstrating how spatial conditions support recurring orientations over time.

Ultimately, from this viewpoint, even the home can also be interpreted through an animist framework. The home can be understood as an environment where agency is distributed among material surfaces, objects, lighting conditions, and atmospheric changes. This agency does not imply intention or autonomy; rather, it points to the capacity of relational spatial conditions to sustain recurring bodily orientations. Even the ordinary dwelling thus becomes a place where relational continuity emerges through repetition, and ritualized interaction is embedded in the fabric of daily life.

4.7 Posthumanist Space: Assemblages of Becoming

> “ *Can architecture be thought, in connection with other series, as assemblage?* ”
>
> — Elizabeth Grosz, 2001

Having traced the conceptual trajectory from agency through temporal transformation, distribution, built elements, and atmospheric experience, this concluding subsection reconceptualizes architectural space as a dynamic assemblage of becoming. Drawing on posthumanist perspectives and Deleuzo–Guattarian notions of assemblage, architectural space is approached as an open-ended process of continuous transformation shaped by heterogeneous relations among human and non-human processes.

Building on this foundation, the current chapter emphasizes the processual and temporal dimensions of architecture. From this perspective, space cannot be understood as a stable or fixed entity; instead, it is a continuously unfolding condition of becoming.

Drawing on the philosophical concepts of becoming and assemblage developed by Gilles Deleuze and Félix Guattari, and their architectural interpretation in the work of Elizabeth Grosz, architectural space can be reconceptualized as an assemblage. In this framework, space is not merely a container for relations; instead, it is produced through those very relations. Spatial experience unfolds as a dynamic process where materiality, temporality, affect, and use function as essential dimensions of posthumanist architectural thought.

Grosz enhances this understanding by framing architecture in terms of its potential connections to what she calls other series: biological, geological, technological, and social processes that exceed disciplinary boundaries. This perspective shifts architecture from being viewed as a

fixed discipline or static object to being seen as a heterogeneous[14], provisional, and productive network.

This broader understanding resonates with Deleuze and Guattari's notion of assemblage in *A Thousand Plateaus* (1987), where an assemblage is defined as a temporary, diverse collection of elements, material, expressive, corporeal, and temporal, that do not form a unified, closed whole. Instead, they compose a dynamic multiplicity capable of generating new capacities, uses, and relations.

What this means for architecture is not merely a formal transformation, but a shift in how space comes into existence. A building, for instance, can be viewed not as a completed object but as an ongoing assemblage of structural systems, climatic conditions, maintenance practices, user movements, infrastructures, and environmental forces. This concept is particularly evident in temporary pavilions, adaptive reuse projects, responsive facades, and digitally mediated environments. These examples illustrate how spatial organization evolves through use, interaction, and environmental feedback, highlighting that architectural space is continually reassembled rather than simply occupied.

This synthesis is defined as a machinic assemblage; "Machinic" is a process that transcends the organic/non-organic dichotomy, operating through the vibrational interaction of desire[15]and matter (Deleuze & Guattari, 1987). In architectural terms, desire can be understood not just as human intention, but as a collection of tendencies: the flow of circulation, patterns of occupation, thermal behaviors, structural stresses, and programmatic shifts that constantly reorganize spatial configurations. Matter can be understood not merely as a passive substance;

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[14] Grosz argues that space itself may be heterogeneous rather than a neutral container, explaining that "the very configurations of space itself may be heterogeneous, just as the movements or configurations of duration vary. Perhaps, in other words, there is a materiality to space itself, rather than materiality residing with only its contents"(Grosz, 2001, p.128). Here, heterogeneous refers to the coexistence and interaction of materially, temporally, and ontologically diverse elements, aligning with Deleuze and Guattari's conception of assemblage as composed of irreducibly different components.

[15] "with desire defined as a process of production without reference to any exterior agency" (Deleuze & Guattari, 1987, p.154).

rather, it is an active participant whose properties, such as weight, flexibility, porosity, and thermal capacity, shape the possibilities of architecture. The concept of the machinic thus describes architecture as a space where diverse forces interact, generating new spatial possibilities.

Grosz's point that "Architecture represents an intermediary between the animal and the mechanical" (2001, p. 154) can be interpreted as demonstrating architecture functioning as an assemblage. In this role, architecture mediates between living and non-living forces, creating new relational potentials within a network of diverse elements.

Through this assemblage-based understanding, the concepts of the rhizome and the Body without Organs (Deleuze & Guattari, 1987) do not directly describe architecture; rather, they provide a conceptual framework through which we can rethink architectural space beyond hierarchical organization and fixed structural logics.

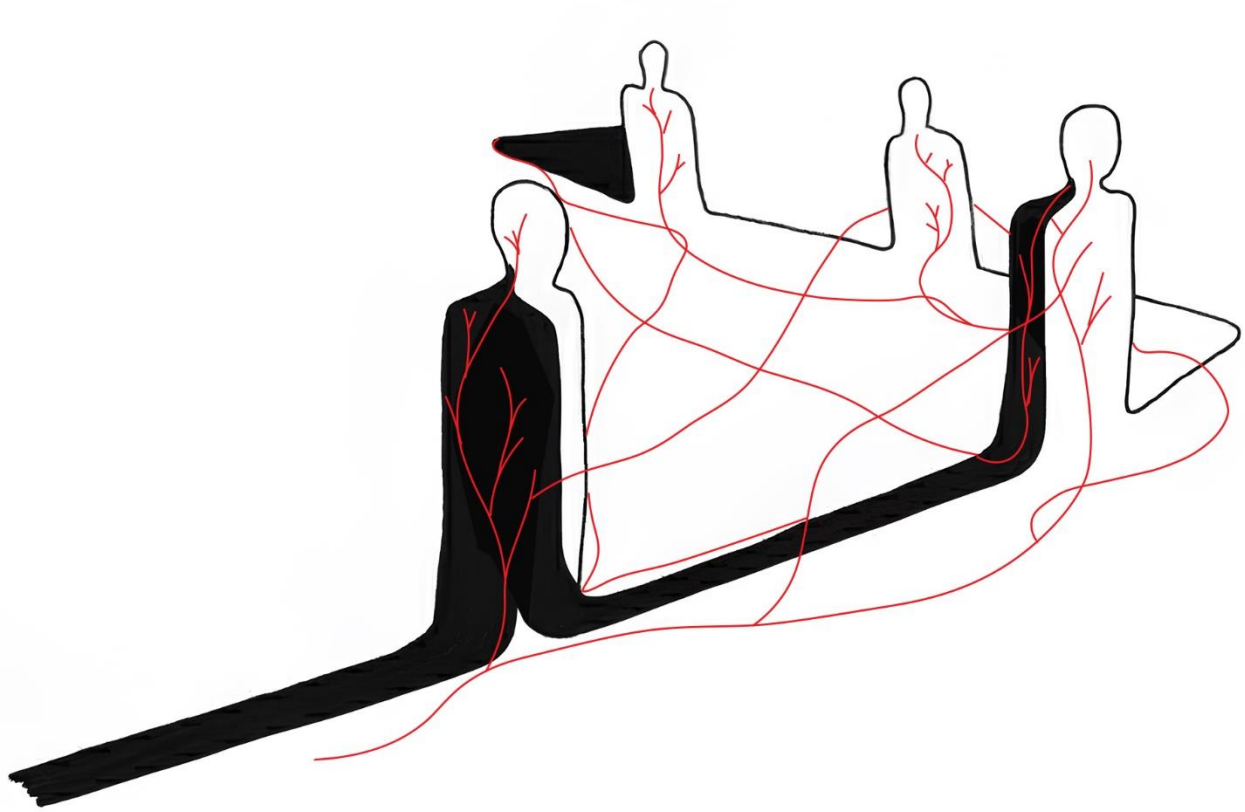


Figure 45. Diagram of Rhizomatic Relations, created by the author.

The Body without Organs (BwO) represents a form of corporeality that operates independently of the systematic unity and hierarchical arrangement of organs. It does not denote the absence of organs, but rather their liberation from predetermined functional roles. This form of corporeality cannot be reduced to a fixed attribute of either the human body or architectural space. Instead, it emerges as a temporary condition arising from interactions between the inherent qualities of bodies and spaces. In this way, the BwO emphasizes a nomadic mode of existence characterized by instability, transformation, and continuous becoming, offering a speculative framework for reimagining spatial relationships within architectural thought.

In this context, architecture can be understood not as a static organism or a hierarchical structure divided into rigid functional sections, but as a plane of consistency that allows the circulation of densities, flows, and relational processes. From this perspective, columns can function not only as load-bearing elements but also as spatial carriers of variable relationships established by light, air movements, user circulation, or environmental vibrations. Similarly, windows can be understood not only as means of observing the outside but also as permeable interfaces where environmental flows come into contact with the space.

In this approach, space is not conceived as a fixed order that completely predetermines the user's actions, but rather as an experiential space where variable relationships between the body and the material environment can emerge. In such a case, situations arise in which the predefined roles of body and matter can be partially stretched, and spatial boundaries can be reinterpreted within the experience.

From the perspective of the Body Without Organs (BwO) concept, architecture can be interpreted as a mode of machinic animistic practice in which walls can interact to environmental influences, floors can be used in variable ways through user interaction, and structural components can assume relational roles beyond predefined functions. Within this framework, the animistic lens should be understood as an interpretive term describing the tendencies of material components that are not reduced to fixed functions; these tendencies can become visible within the architectural environment through a network of collective relationships.

This approach does not refer to the absence of organs, but rather to their partial independence from predetermined functions. For example, rigid functional distinctions, such as defining a

kitchen solely for cooking or a bedroom solely for sleeping, can be questioned; space can instead be reconsidered as a field of relationships open to different densities and forms of use.

This speculative framework can be illustrated through projects such as the Jussieu Library Project designed by Rem Koolhaas's OMA office. In the Jussieu proposal, instead of being designed as separate flat layers, the floors are interconnected, thus they can be experienced as a single surface through the continuity of slotted and sloping ramps.

In this case, space can be understood not as the sum of specific "organs" (such as rooms or floors), but as a continuous surface that allows for the circulation of information flows, user movements, and programmatic densities.

Figure 46. Relational Surface Diagram of the Jussieu Library Project (OMA / Rem Koolhaas, 1992), adapted and redrawn by the author from Koolhaas (1995/1998).

The concept of "spatial corporeality" cannot be simply defined as the human body or the built environment as separate entities. Instead, it emerges as a temporary state created through the intense interactions among bodies, materials, atmospheres, and movements. The Body without Organs (BwO) suggests a nomadic mode of spatial existence characterized by instability, transformation, and continuous change. Rather than viewing architecture as a stable structure

that contains life, this perspective understands it as a dynamic field of ongoing negotiations where life, matter, and technology collaboratively shape space.

This perspective invites an animist way of rethinking architecture. The building or space is no longer a passive object awaiting human activation, but a living participant with the capacity for influence and to be influenced. Materials expand, contract, wear, echo, and transmit; sensors record and modulate environmental data; air currents distribute temperature and odor; lighting conditions shape perception and mood. User bodies, technical devices, and environmental forces work together as mechanized mechanisms that generate their own flows of intensity and rearrange architectural conditions. In this sense, agency is distributed between human and non-human actors.

Guattari's ecosophy directly links this machinic structure to architecture. As he emphasizes in *The Three Ecologies*, “now more than ever, nature is inseparable from culture; we must learn to think ‘transversally’ to understand the interactions between ecosystems, the mechanosphere, and the social and individual universes of reference” (Guattari, 2000, p.43).

Transversality requires seeing the connections between nature (ecosystems, climate), machines (technologies, infrastructures), people (users, communities), emotions, and institutions in architecture; architectural space becomes a network that transcends these boundaries.

In the same work, Guattari warns against the entropic rise of capitalist subjectivity: “We must ward off, by every means possible, the entropic rise of a dominant subjectivity” (Guattari, 2000, p.68).

Guattari’s notion of "machinic animism" further deepens this shift. Here, subjectivity is not restricted to human consciousness but extends across technical systems, ecological processes, and material environments. Machinic animism provides a connection between architecture and an animist perspective. It posits that subjectivity extends beyond just human consciousness; it emerges as a distributed process. Sprits or entities can reassemble within various networks, transforming into new forms through interactions with machines, technologies, nature, and ecosystems. This creates a machinic, non-anthropocentric type of subjectivity that blurs the lines between subject and object, individual and collective, as well as human and non-human.

In an architectural context, this involves the spiritual vibrations of the building and space: a structure produces subjectivity as an assemblage with user bodies, material flows, environmental elements, and digital networks, transcending ontological boundaries.

This allows for identities to be reconstructed, even within the framework of Western architecture. As James Stanescu points out, capitalist production, exemplified by the idea of being “More Human Than Human,” disconnects humanity from the reality of its true animal nature (Stanescu, 2013, p. 144–145). In contrast, machinic animism advocates for a shared subjectivity with non-human entities in architectural spaces, resisting this disconnection.

Chapter 5

Multiperspectival Explorations of Relationality in Architecture

> " *We have suggested that relation is an open totality evolving upon itself* "
>
> — Edouard Glissant, 1997

Methodological Framework: Theoretical Animist Lens

This chapter establishes the methodological backbone of the thesis. Architecture is examined not as a static object or a mere representational structure, but as a dynamic entanglement of relational processes unfolding between bodies, materials, spatial configurations, and environmental forces.

By adopting animism as a theoretical framework and integrating concepts from phenomenology, neuroscience, and post-humanist theories of assemblage, this chapter explores an experiential understanding of architecture through selected case studies and vignettes.

The animist lens reads architecture as a field of responsive relations in which materials, bodies, and environments participate in processes of mutual affective modulation. Through this lens, architecture is approached not as an inert form, but as a relational condition continuously shaped through encounter.

This animist position is triangulated with three complementary perspectives:

- Phenomenology emphasizes embodied perception and situated experience, foregrounding pre-reflective spatial attunement.
- Embodied cognition transcends the mind–body–environment triad by integrating emotion into interoceptive processes and framing cognition as a predictive, reciprocal cycle of action and perception.
- Post-humanist assemblage theory decenters human agency, distributing it across human and non-human actors (materials, technologies, atmospheric conditions, other living systems).

Together, these perspectives reframe architectural space as a dynamic body–environment assemblage.

The selected case studies are not analyzed to confirm theoretical positions or reconstruct the intentions of their designers. Instead, they function as experimental fields for activating and testing the proposed methodological framework. Each case is examined through a consistent experiential matrix that maps relational intensities across temporal unfolding, bodily orientation, material behavior, and non-human influences. The matrix does not classify architectural space; rather, it traces degrees of coupling, responsiveness, and affective charge through which spatial experience emerges.

To establish an embodied point of entry into these analytical readings, this chapter integrates multiple vignettes alongside the matrices. These brief experiential narratives do not function as explanations, interpretations, or representational descriptions of architecture. Instead, they operate as situated experiential thresholds, guiding the reader toward the sensory and affective conditions within which the subsequent case readings unfold. In this way, the vignettes do not generate meaning but prepare perception, anchoring abstract relational analysis in lived experience. The chapter does not aim to provide comprehensive descriptions of the selected buildings; rather, it demonstrates how architecture can be understood as a relational assemblage shaped through dynamic interactions among human and non-human actors.

The patterns and intensities identified through these multiperspectival explorations form the foundation for the following chapter. There, relational readings are translated into architectural

design principles and operative strategies. Chapter 6 builds directly upon the methodology established here, shifting from interpretive analysis toward design operations that remain open, adaptive, and transferable.

The following methodological sequence structures the analysis of each case:

Phase 1: The Encounter (Vignette); an experiential threshold through which the relational field first becomes perceptible.

Phase 2: Visual Deconstruction (Storyboard); the unfolding of spatial sequences and perceptual transitions across time.

Phase 3: Relational Analysis (The Matrix); the matrix traces these intensities across four analytical registers: spatial occurrence, bodily/interoceptive effect, distributed non-human agency, and emergent relational response.

Phase 4: The Revelation (Site Identity); the delayed revelation of the site's identity, allowing its relational character to emerge as a dynamic configuration rather than a pre-given, fixed essence.

Phase 5: Synthesis (Operational Relationalism); the translation of relational readings into conceptual and operative architectural criteria.

Methodological Note

On the Anonymity of Place in Vignettes:

Within the experiential vignettes, the architectural sites are intentionally left unnamed. With this methodological decision, we aim to suspend recognition, authorship, and historical framing to foreground the immediacy of embodied encounter. By withholding the identity of the site,

the vignette directs attention away from architecture as object and toward architecture as lived condition.

This anonymity prevents the reader from approaching the space through preconceived symbolic, stylistic, or historical associations, allowing perception to unfold relationally rather than representationally. The vignette, therefore, does not introduce a building, but stages an experiential threshold through which spatial relations between body, material, atmosphere, and environment become perceptually accessible.

The architectural identity of each case is revealed only after the experiential and analytical readings, ensuring that recognition follows experience rather than determining it.

Perceptual Storyboard Reading:

The storyboard does not illustrate the space as an object, but decomposes the experiential sequence through which the spatial encounter unfolds. Each frame isolates a perceptual condition, allowing the relational structure of the encounter to become analytically legible. Rather than representing architectural drawings, the storyboard maps transitions in bodily orientation, atmospheric density, and environmental modulation.

The Matrix Reading:

This matrix was constructed through a situated autoethnographic approach based on iterative on-site engagement, combining walking, pausing, sketching, and photographic capture by the author. Rather than documenting form, these recordings registered moments where bodily orientation, breath, pace, or attention shifted in response to environmental modulation. Each entry, therefore, marks not an objective property of space, but a point of intensified coupling between interoceptive experience and material or atmospheric agency. Repeated visits and cross-readings of sketches and images allowed recurrent relational patterns to stabilize into the analytical fields presented in the matrix, ensuring a systematic and comparable mode of observation rather than an isolated subjective account.

While grounded in the author's situated experience, the method seeks reproducibility at the level of relational pattern rather than individual perception. The recurrence of similar bodily

adjustments, atmospheric modulations, and material influences across multiple visits allowed certain couplings to stabilize as analytical categories. In this sense, the matrix does not universalize experience, but renders relational dynamics traceable, comparable, and transferable across cases.

The matrix is not intended to function as a linear diagram or a causal model. The eight experiential phases do not represent a fixed sequence, but rather overlapping conditions that co-emerge during spatial encounter. While the phases may appear to unfold temporally, they operate simultaneously as layered relational fields.

5.1 Experimental Vignettes and Case Readings

Vignette I:

The moment you step down, the air thickens with a density that precedes thought. Your body senses it first: temperature drops, not as mere cold, but as viscous pressure. Humidity sticks to your skin, slows your breath as if the space itself measures and modulates it.

Sound refuses straight paths here. Each step sinks into the surface below, dissolving rather than echoing. A slight ripple arrives before its source reveals itself. Boundaries stay hidden in the dimness; depth shifts from visual certainty to bodily hesitation.

Your eyes gradually adjust. Vertical presences rise not as distinct objects, but as insistent repetitions stretching beyond grasp. Their number eludes you. Orientation softens, loosens.

Your step speed alters.

You walk, yet you listen.

You listen, yet you feel observed by what, exactly, remains unclear.

The ground beneath is solid, yet encircled by liquid instability. Water never blocks your path, but it encircles your every move. With every step, you part the space itself, as if your body were cutting through volume, creating ripples that spread outward, breaking the stillness and

revealing hidden depths. The water's surface reshapes itself according to your motion; the darkness parts slightly at your presence.

You are not just moving through space; you are creating it by half, by cutting through.

The space does not reflect you cleanly; it disperses you across its surface, scattering fragments of light, shadow, and your own blurred motion.

A drop falls in the distance. You pause. The sound lingers, stretching across the volume before it fades. Time thickens within the enclosure.

Wet stone and mineral air fill your lungs: immediate, persistent, physical. Surfaces do not speak, but they press. Moisture, stone, darkness, water weave a field that refuses passivity.

Your shoulders pull in slightly.

Steps become more conscious.

The body maps what vision has yet to reach, carving out the unseen with every advance.

Here, space is no longer a container. It presses, it envelops, it accompanies. Columns stand motionless, water stays distant, darkness never fully closes, yet together they recalibrate your posture, your rhythm, your presence.

You do not dominate the space. The space does not dominate you.

A quiet negotiation holds. Within it, the space acts as if it has adapted to your arrival, sensing without possessing. And in this harmony, your body continues to part the volume, as if the descent were a mutual act of opening. When you ascend once more, the descent remains unchanged below. Yet within you, the relation has shifted.[16]

[16] This vignette foregrounds particularly the bodily/interoceptive and emergent relational responses, which will be traced in the subsequent relational matrix.

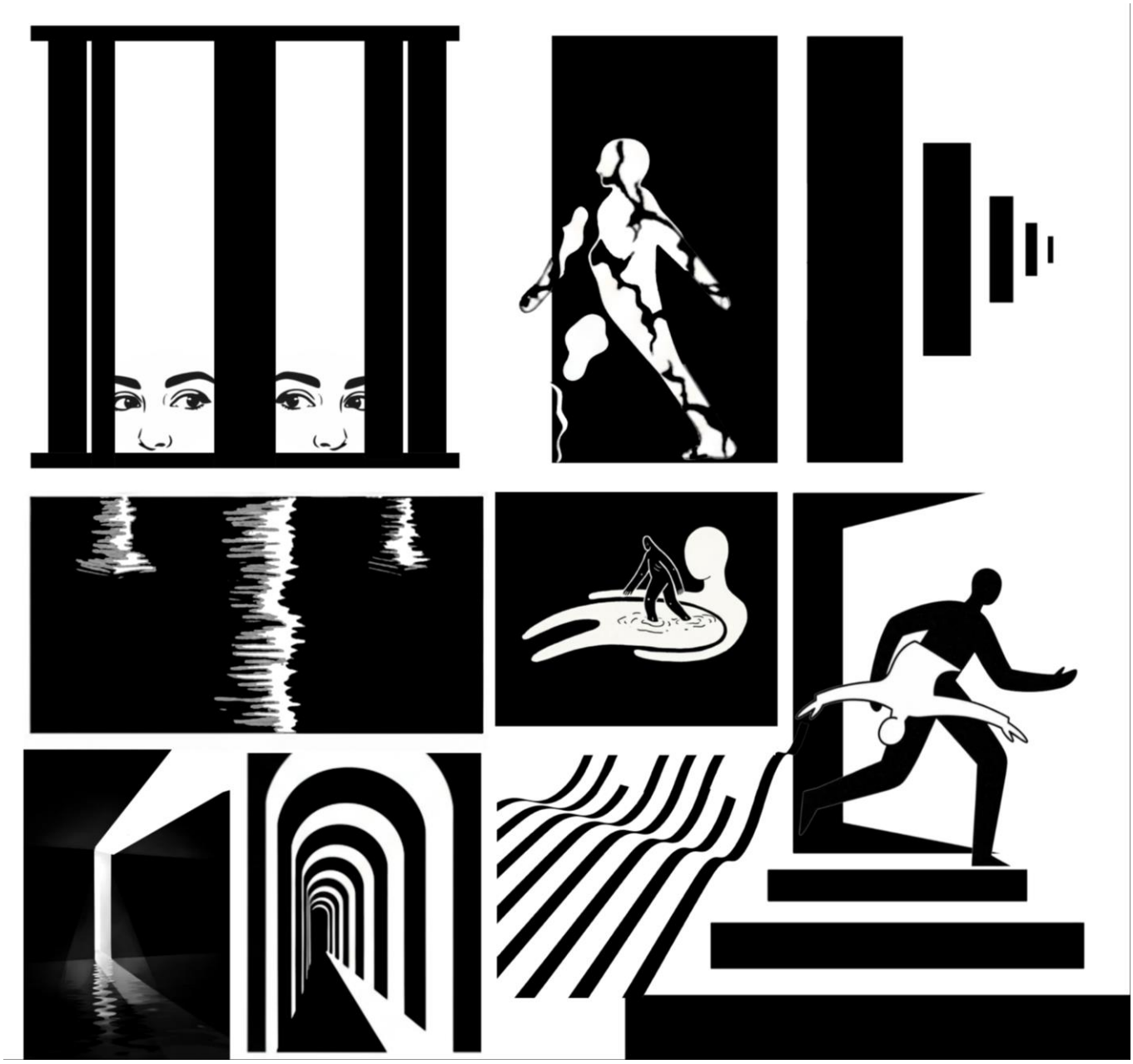


Figure 47. The storyboard of Vignette I, created by the author.

Experiential Dimension	Spatial Occurrence (What occurs?)	Bodily / Interoceptive Effect (What is felt?)	Non_Human Agency (What acts?)	Emergent Relational Response (What emerges?)
Treshold/ Descent	Air thickens, light diminishes, boundaries blur; descent produces transition	Pressure, slowed breath, cautious body	Humidity, temperature, dense air	First negotiation; the body senses before cognition
Rhythmic Orientation	Steps sink; echoes disperse; rhythm slows	Walking pace shifts; listening intensifies	Visual uncertainty, bodily disorientation	The body adapts to the rhythm of the space; the orientation softens
Material Continuity & Vitality	Stone, water, and moisture form a continuous field; surfaces are not passive	Humid air fills the lungs; a feeling of surface pressure	Stone, water, mineral atmosphere	Material behaves like a living space; the environment becomes active
Temporal Density	A drop stretches across the volume; time thickens	Pause, temporal expansion	Drip, echo, dark volume	Time becomes dense rather than linear
Diffuse Illumination & Shadow Play	Darkness breaks apart; light disperses; boundaries are hidden	Visual uncertainty, bodily disorientation	Reflections, shadow, water	Space read through body rather than sight
Reflective / Resonant Ground	Water reshapes with movement; ripples spread	Sense of cutting through volume	Water surface, wave propagation	The body and space create a mutual resonance
Atmospheric Enclosure / Openness	Space envelops without closing; water surrounds but does not block	Shoulders are drawn inward; attention increases	Surrounding humidity, darkness	Enclosure and openness coexist; accompanying space
Relational Assemblage	Columns, water, darkness, and body form a field	Feeling observed; poised tension	Architectural repetition, liquid field	Mutual harmony; co-presence

Figure 48. The Matrix, Relational Analysis, created by the author.

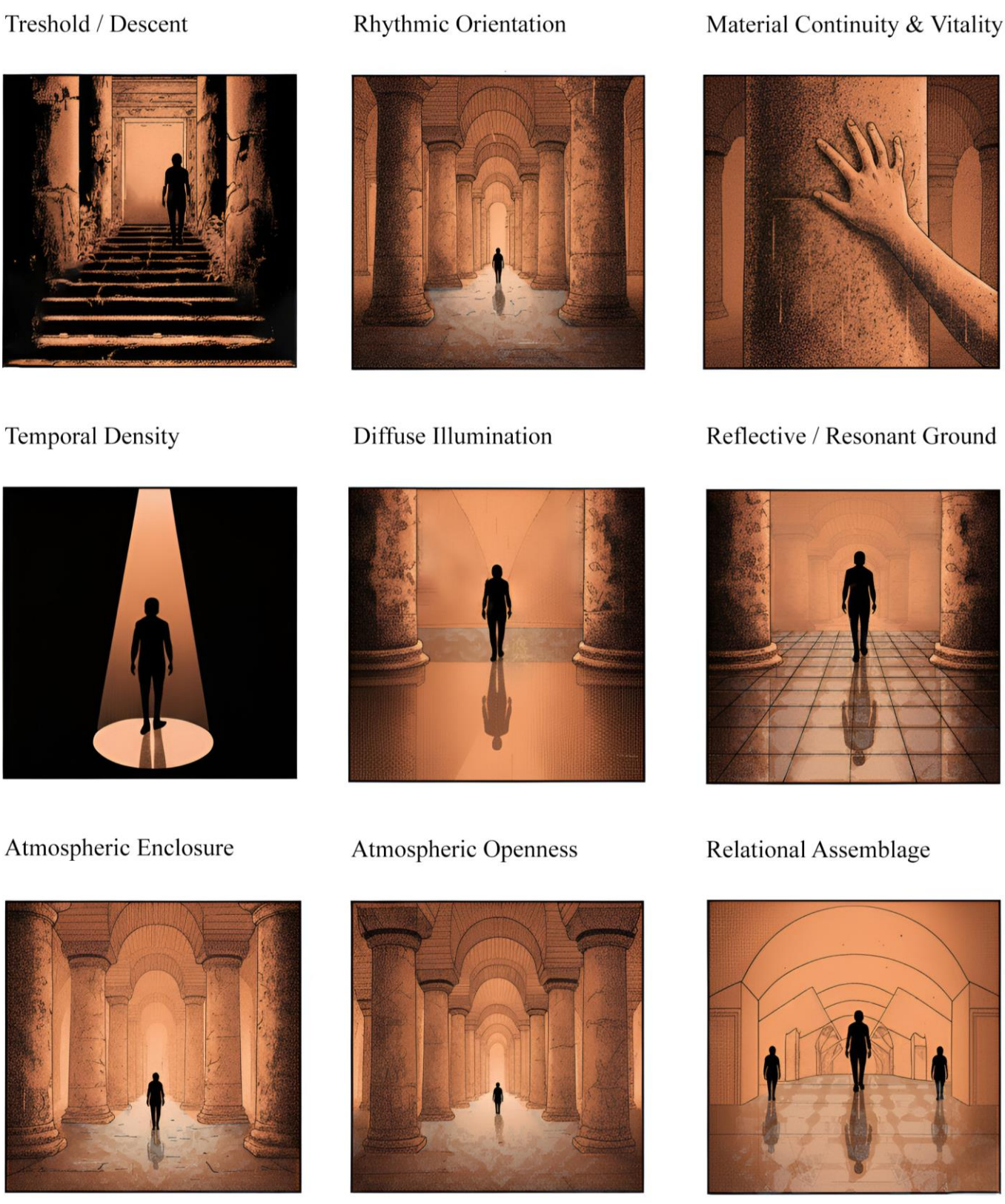


Figure 49. Site Identity, created by the author[17]

[17] These drawings do not represent the space exactly; they emerge from the relational structure mapped in the matrix.

The following photographic fragments reveal the physical site that grounded the preceding experiential and relational readings.

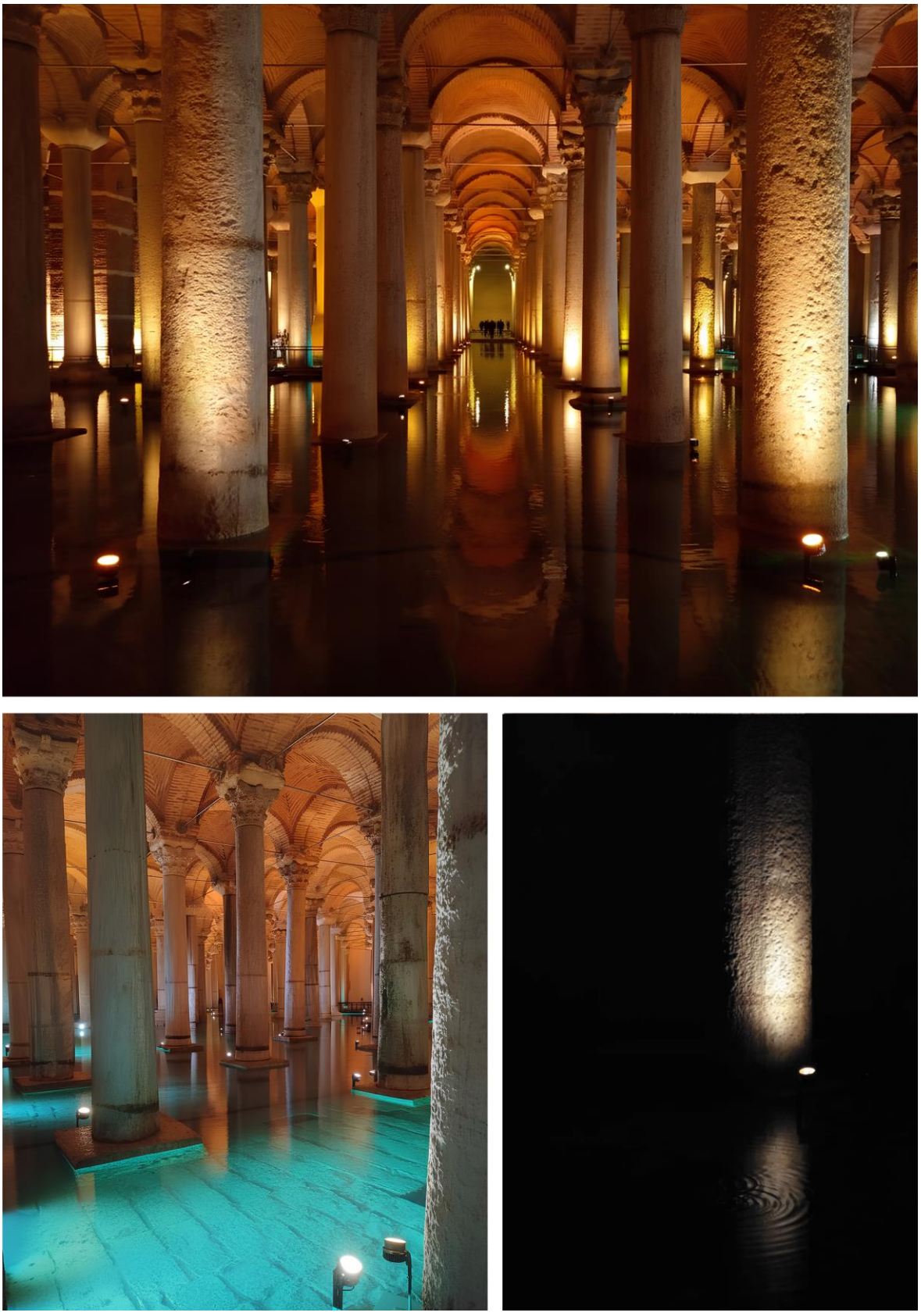


Figure 50. The Basilica Cistern Museum, Istanbul, photographs by the author.

The Basilica Cistern (Yerebatan Sarnıcı), constructed in the 6th century during the reign of Byzantine Emperor Justinian I, was built to supply the water needs of Istanbul (Erbaş & Tuncel, 2022). It is supported by hundreds of stone columns. The structure was originally designed as an infrastructure system for water storage, but today it is used as a museum.

The cistern is defined not by monumental exterior form but by subterranean depth, dim luminosity, humidity, acoustic resonance, and reflective water surfaces. Light enters only in fragments, dissolving spatial boundaries and destabilizing clear orientation. Columns appear both solid and immaterial through their reflections, while water acts as an active material agent, continuously transforming perception.

The case reading of the Cistern reveals the following:

- Space is not perceived visually first, but atmospherically (darkness, humidity, sound, temperature).
- The body does not dominate the environment; instead, it negotiates with a spatial field that exceeds visual control.
- Material elements (water, stone, light, echo) act not as passive matter but as active participants shaping perception.
- Orientation is unstable; space is experienced as depth, suspension, and immersion rather than geometry.

Architecture here operates less as form and more as a condition of co-emergence between body and environment. From an animist lens, the cistern is readable not as a symbolic or representational space but as a living, relational assemblage in which agency is distributed across human and non-human actors.

Synthesis of Relational Dynamics:

Figure 51 demonstrates that the Basilica Cistern operates not merely as a historical infrastructure but as a relational field in which human and spatial agencies continuously interact. The mapping yields the following synthesized observations:

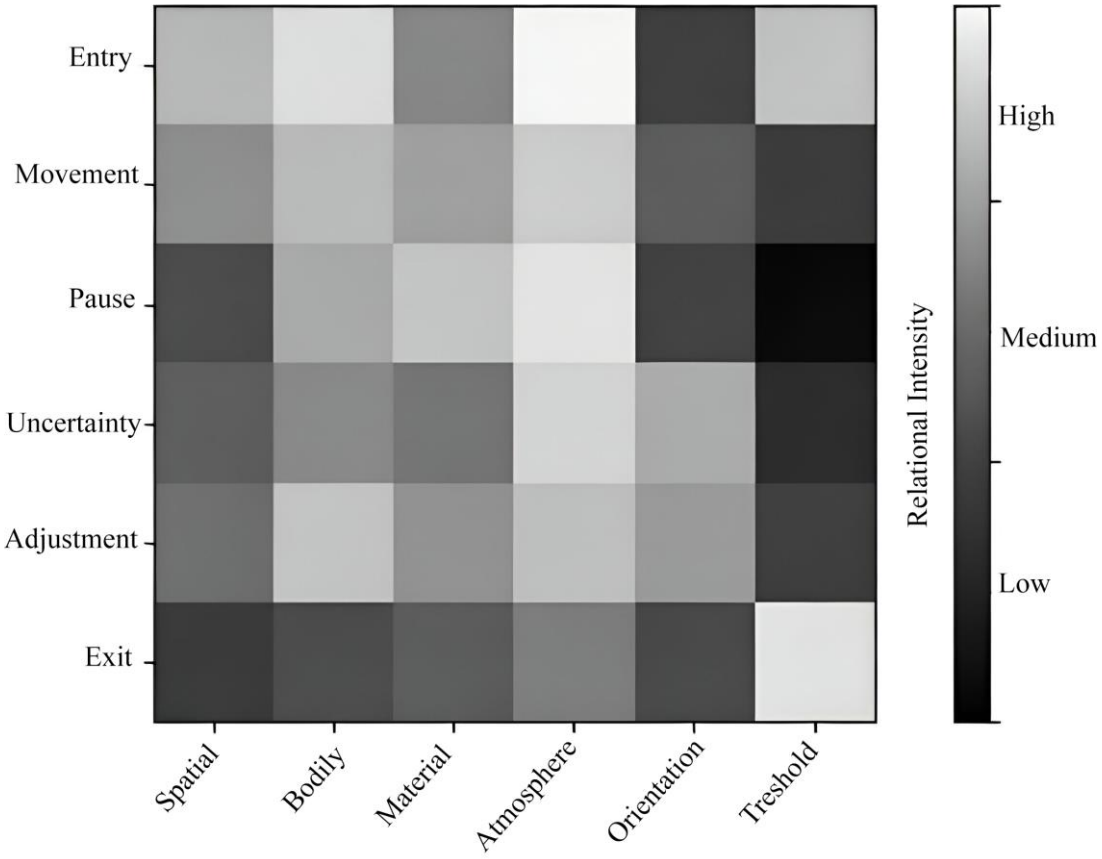


Figure 51. Relational Intensity Map[18], created by the author.

Dominance of Atmosphere;

As shown by the map, the atmosphere column maintains a persistent high intensity (white/light grey) across nearly all phases, particularly during the entrance and pause moments. The environmental parameters, humidity, low luminosity, and acoustic reverberation consistently register the highest relational intensities throughout the experiential sequence, indicating that the cistern operates less as a discrete visual object and more as an enveloping atmospheric field modulating bodily perception and physiological rhythms.

[18] This diagram operates as a mapping device, or resonance table, through which relational intensities, reciprocal modulations, and affective couplings become traceable and comparable.

Bodily Mapping;

In situations where visual depth and clear orientation diminish, there is a noticeable increase in our understanding through bodily and material experiences. This suggests that our perception of space shifts towards tactile and kinesthetic modes, as indicated by the lighter-toned areas on the bodily column of the map. Consequently, space is not understood primarily through sight, but is gradually navigated through embodied interactions.

Material Agency;

During the pause moment, the material density, combined with the low surface temperature of the stone in the cistern and the stillness of the water, is observed to be associated with a significant decrease in the visitor’s speed of movement and a bodily pause; this condition is emphasized on the map through areas marked in lighter tones.

Conclusion:

Architectural operation in the Basilica Cistern extends beyond mere organization toward a condition of co-emergence between body and environment. The Relational Intensity Map indicates that the highest density (lightest colored) areas on the map represent the moments when the cistern is ontologically most dominant. The cistern suspends the visitor's detached observer position by pushing them into ambiguity, transforming them into a functioning limb of the space; thus, the boundaries between subject and environment dissolve. This reveals a state of "co-emergence" where stone, water, and atmosphere dissolve the human being within their own rhythm, reconstructing the space as a collective and living organism. Read through an animistic lens, stone and water, conventionally framed as inert matter in architectural thought, are reconfigured as materially agentive forces participating in the co-constitution of spatial experience. Material elements emerge not merely as represented but as agents that direct and produce effects on the experience; stone does not merely exist, it slows down the body; water does not merely reflect, it reshapes perception.

Vignette II:

The moment you approach, the forms hang suspended above the street, angular volumes perched on narrow supports, their surfaces catching the light in unexpected ways, like fragments of a levitating canopy.

Your body registers the strangeness first: orientations feel slightly off, gravity questioned before you even step closer.

The ascent is a pull on the legs; the narrow, sloping steps require you to lean forward. At the entry, the threshold opens into a rotated world.

No surface stands truly vertical; planes converge at odd angles, ceilings recede sharply.

You tilt your head towards them, and your shoulders adjust instinctively.

Inside, the volume compresses and expands unpredictably. The floor remains level, yet the surroundings push against normality, walls converge, and corners sharpen into points.

Each step requires recalibration: hips shift, and your gaze lifts to avoid the looming lines. With every movement, you slice through the converging planes, as if your body is carving alignments out of the misalignment. The space resists your passage, forcing it to accommodate your upright posture amidst the tilt, effectively creating the room halfway through your presence.

Light enters from multiple directions through broad openings sideways, upward, and downward, stretching shadows long and unnatural across inclined surfaces. Looking out, the world outside reframes: streets curve upward in the frame, sky approaches from high peaks.

The view doesn't just show the city; it repositions you within it.

Echoes behave oddly, and sounds reflecting off angled surfaces become slightly distorted. Footsteps land differently depending on position. A faint external hum seeps through seams, a reminder that the structure is in constant dialogue with the wind and the street below.

Your breath quickens at first, then finds a new rhythm. Shoulders relax only with deliberate effort.

The body maps the unfamiliar: it leans against resistant surfaces, perches upon structural elements that feel temporary, and reaches into placements that logic would never suggest.

Here, space refuses to be a passive container. It challenges, modulates, recalibrates. The angles stand fixed, openings remain open, yet together they adjust your balance, your vertical sense, your very posture.

Your body does not command the space.

The space does not command your body.

A quiet negotiation emerges. Within it, the field seems attuned to your attempts at equilibrium, sensing your shifts amid the distortion.

As you descend back to level ground, the street rights itself. Yet within you, the relation persists, shifted, half-reoriented by your passage through the unfamiliar geometry.

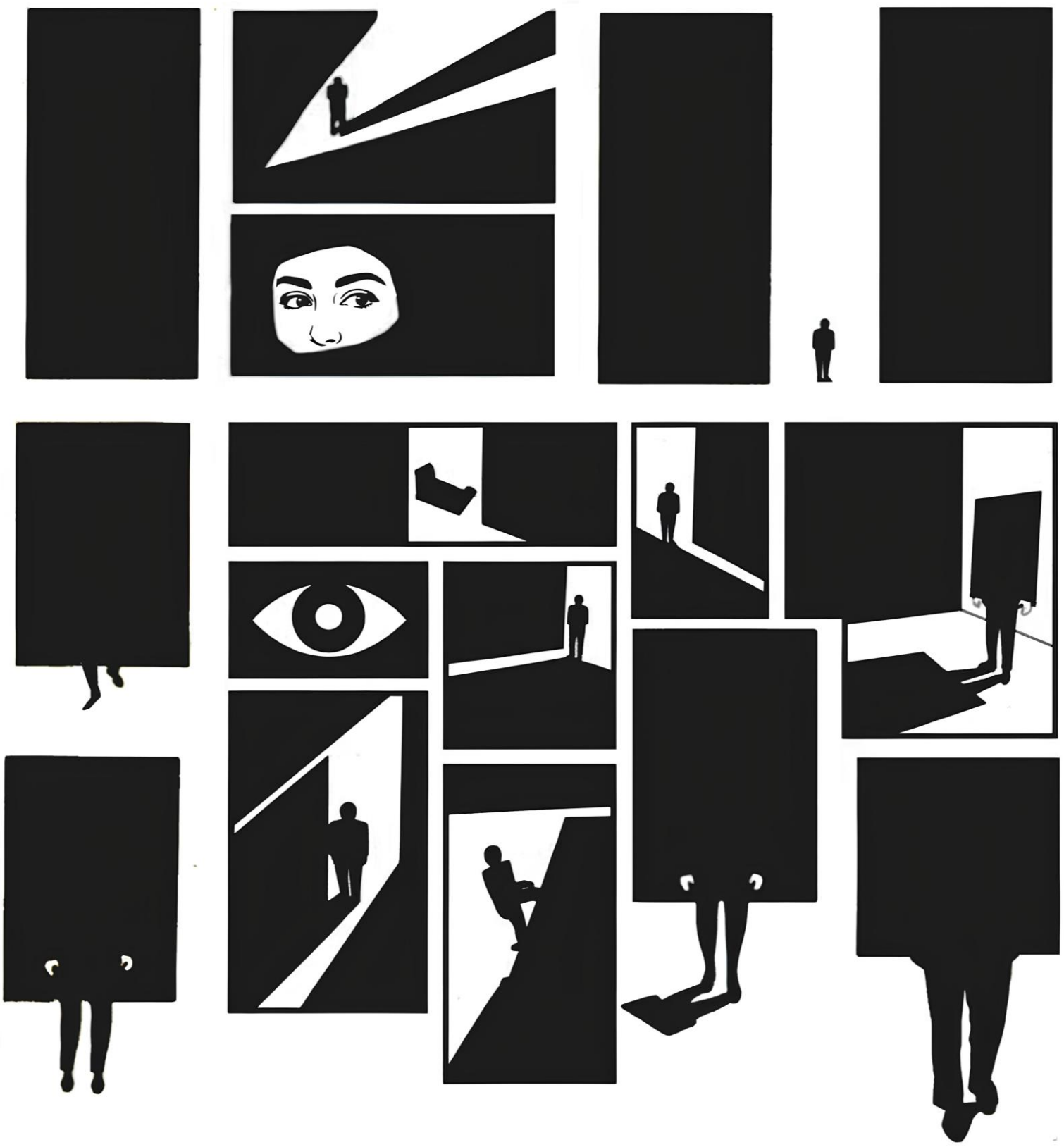


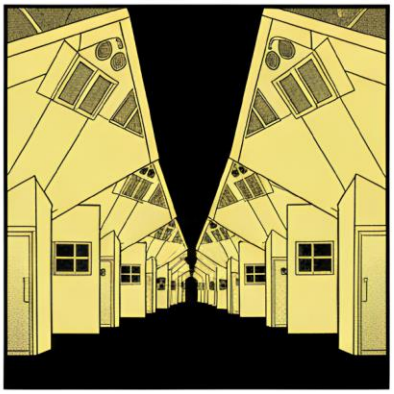
Figure 52. The storyboard of Vignette II, created by the author.

Experiential Dimension	Spatial Occurrence (What occurs?)	Bodily / Interoceptive Effect (What is felt?)	Non_Human Agency (What acts?)	Emergent Relational Response (What emerges?)
Treshold/ Descent	Suspended volumes, sloped stairs; rotated interior at the entrance	Gravity questioning; leaning forward; cautious step	Inclined structure, hovering mass	Spatial negotiation that begins with the search for balance
Rhythmic Orientation	The steps are adjusted; the movement transforms into a quest for alignment	Shifted hips; tilted head	Inclined planes, sharp corners	New alignment within misalignment
Material Continuity & Vitality	Surfaces fixed yet destabilizing; compression/expansion	A feeling of resistance; the need to lean against surfaces	Compressed-expanded volume, distorted echo	Space is organized in conjunction with the body
Temporal Density	The movement slows; each step becomes deliberate	Breathing quickens, then regains its rhythm	Gravitational ambiguity, converging geometries	Time thickens around the equilibrium
Diffuse Illumination & Shadow Play	Multi-directional light; unnatural shadows; reframed exterior	Visual instability	Openings, glare, incline	Vision is repositioned; the body becomes the spatial reference
Reflective / Resonant Ground	Sounds are distorted on angled surfaces; footsteps change	Acoustic uncertainty	Echo, surface angles, external hum	Sonic dialogue with environment
Atmospheric Enclosure / Openness	Open yet pressuring	Deliberate relaxation of shoulders	Wind, openings, suspended structure	Openness and tension together; space modulates balance
Relational Assemblage	Geometry, light, sound and body co-constitute	Reoriented body; semi-harmony	Angles, volume, light, wind, city	Mutual harmony; body and space align together

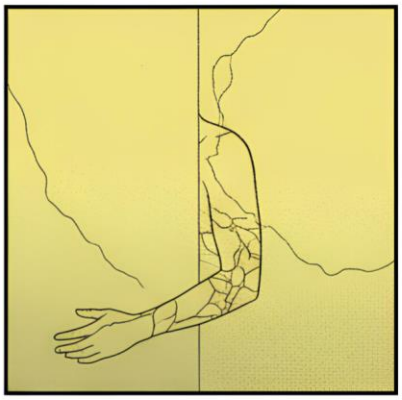
Figure 53. The Matrix II, Relational Analysis, created by the author.

Treshold / Descent

Rhythmic Orientation



Material Continuity & Vitality



Temporal Density

Diffuse Illumination

Reflective / Resonant Ground

Atmospheric Enclosure

Atmospheric Openness

Relational Assemblage

Figure 54. Site Identity II, created by the author.

The following photographic fragments reveal the physical site that grounded the preceding experiential and relational readings.

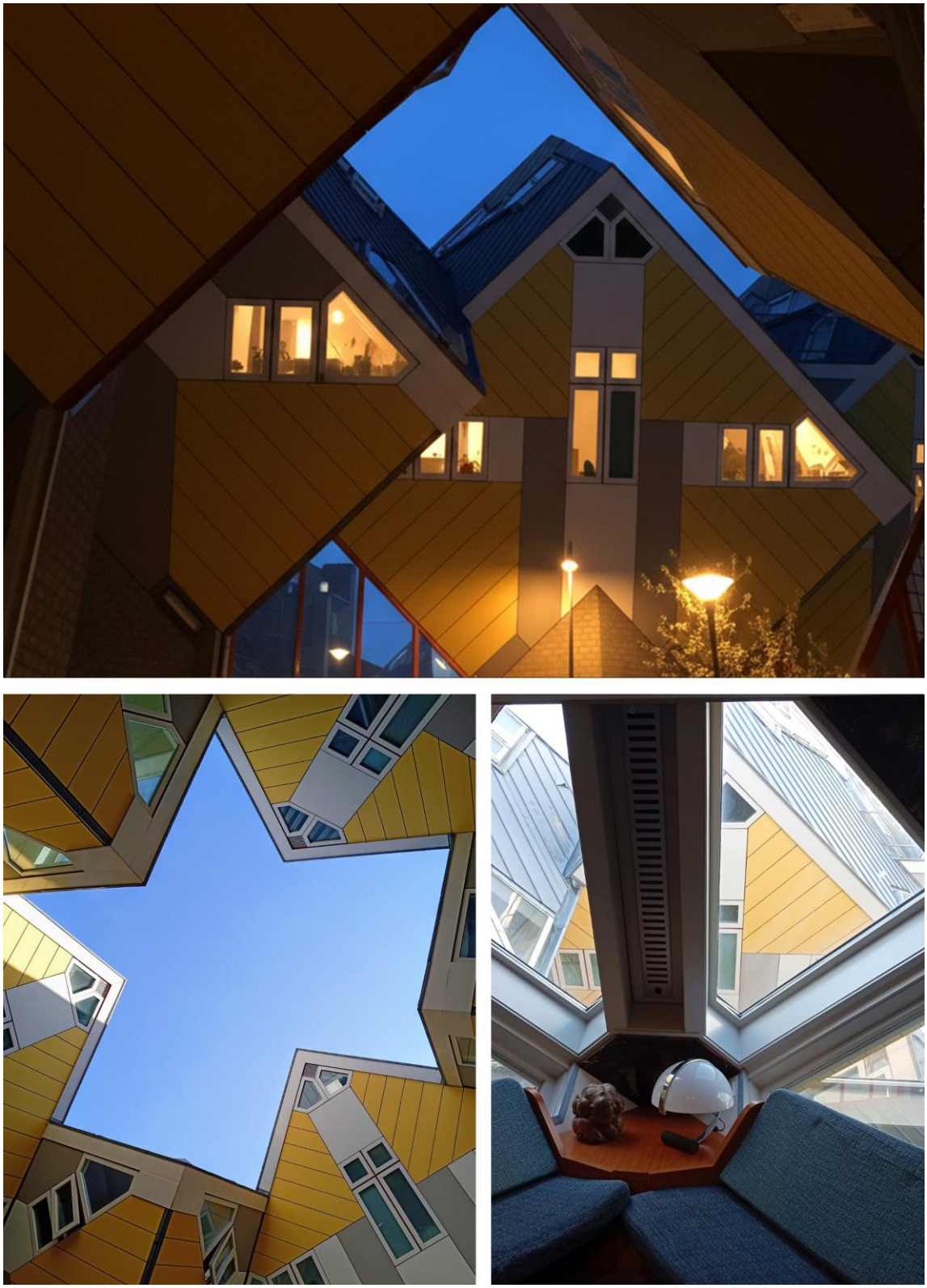


Figure 55. Cubic Houses, Rotterdam, photographs by the author.

Kubuswoningen, also known as Cube Houses, is a unique housing project located in Rotterdam, designed by Dutch architect Piet Blom (1934–1999). Completed in 1984, this project is one of the most distinctive examples of late 20th-century experimental housing. Each dwelling is organized across multiple levels within a rotated cubic envelope, where conventional vertical and horizontal alignments are displaced.

Light fragments spatial coherence and stretches shadows across inclined surfaces. Boundaries do not remain fixed; interior and exterior interpenetrate through oblique apertures, reframing the surrounding city as tilted and repositioned. Walls converge, corners sharpen, and ceilings recede, producing a spatial field that resists stable alignment. Space behaves not as a passive container but as a responsive field shaped by inclination, gravity, light, and resonance.

The case reading of the Cube Houses reveals the following:

- Space is perceived not primarily visually but through bodily imbalance, tension, and recalibration.
- The body does not command space; it negotiates equilibrium within a field of geometric distortion.
- Architectural elements (inclination, suspended volume, light, echo, gravity) operate as active agents shaping perception.
- Orientation remains unstable; space is experienced as tilt, negotiation, and relational adjustment rather than fixed geometry.

Synthesis of Relational Dynamics:

The Relational Intensity Map (see Figure 56) for the Kubuswoningen demonstrates that Piet Blom's design operates not merely as a residential typology but as a radical relational field that destabilizes and reconfigures the dialogue between the inhabitant and the domestic environment. The mapping yields the following synthesized observations:

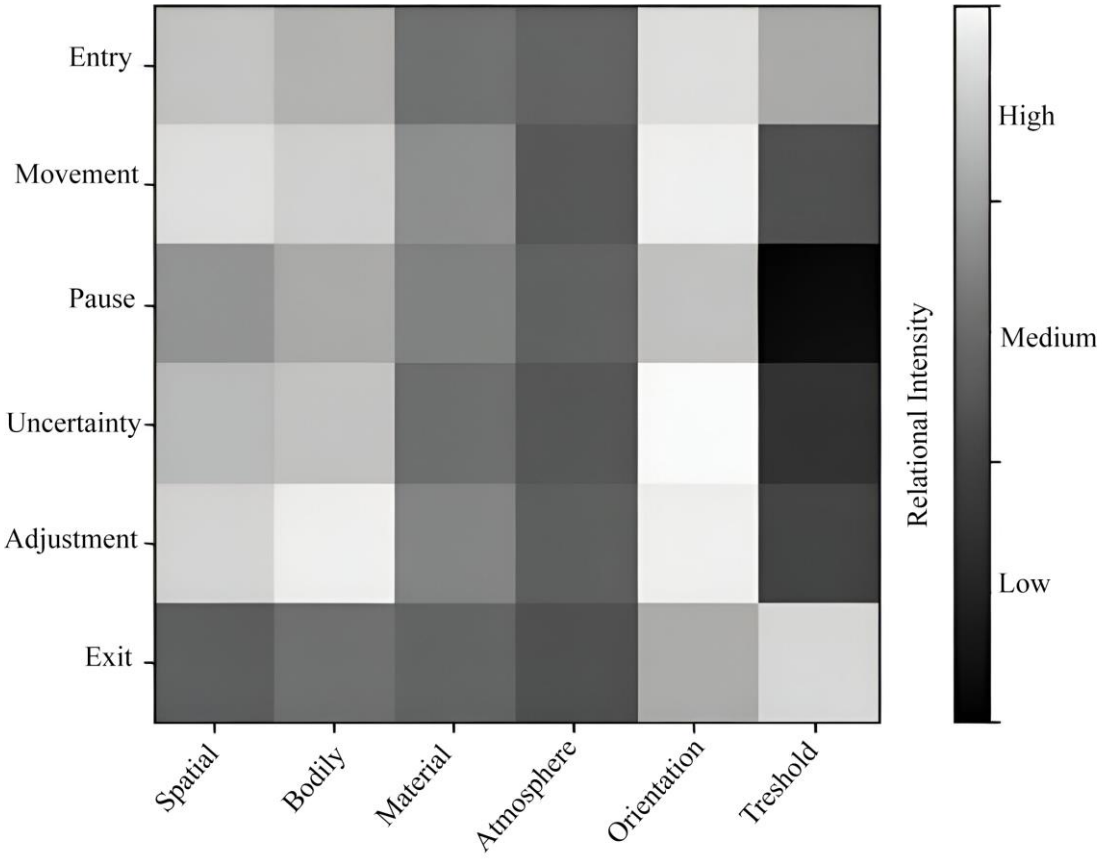


Figure 56. Relational Intensity Map II, created by the author.

Dominance of Orientation and Spatial Tension;

In the orientation column of the map, the consistently high density (white/light gray) observed in almost all phases from entry to exit demonstrates that spatial orientation ceases to be a fixed geometric information and transforms into a dynamic process of relational adaptation.

The rotated cubic envelope and displaced horizontal-vertical alignments prevent the space from behaving like a passive container, instead framing it as a constant field of tension.

Bodily Mapping;

During the movement and adjustment phases, where visual depth and conventional vertical references weaken, the increased density in the bodily column is readable. These lighter-toned areas on the map indicate a shift in spatial perception from optical dominance to a kinesthetic mode negotiating with gravity. Instead of dominating space, the body seeks a constant equilibrium within geometric distortion.

Material Agency;

In pause and uncertainty phases, spatial orientation becomes destabilized as material and atmospheric conditions intensify. Lighter tones on the map show how physical features such as slopes and suspended volumes create a sense of change in the visitor, especially when walls converge, corners sharpen, and ceilings draw back.

Conclusion:

The architecture of Kubuswoningen goes beyond mere shelter, creating a radical co-emergence between body and environment. The lightest areas on the Relational Density Map mark moments when the cubic form dominates, preventing the visitor from remaining a passive observer. The space unsettles the visitor through imbalance and geometric uncertainty, drawing them into part of a spatial movement and blurring the line between self and house. Through an animist lens, slope, light, and gravity become active forces that shape experience. In Kubuswoningen, stone and angles engage the body continuously, producing rather than reflecting spatial perception.

Vignette III:

The moment you step into the void, your body reacts before you do. Your heart races; you don't measure it, but you feel it. Your steps unconsciously shorten. The vast volume overwhelms you, not just because it's large, but because it's immeasurable. The echo of your voice is delayed; your own presence arrives late.

This moment is not a conscious fear.

The body reads the signals from the environment more quickly.

A shadow concentrating in a corner becomes the first point your eye catches. You don't know what it is. But it is precisely this uncertainty that removes the shadow from being an object. At that moment, the space is rearranged. The void, which was just a volume a moment ago, is now a potential threat zone. Your gaze begins to oscillate between the shadow and the possibilities of escape.

Your feet change direction.

Your shoulders slightly close.

The body redraws the space.

This space is no longer neutral for you. The walls become not just boundaries, but shelters. Openings become not just passages, but escape routes. The coordinates of fear shape the space; you don't draw the plan, but your body does.

It seeps upwards from the cold concrete floor. You feel it not just under your shoe soles, but through your legs, your spine. The smell of rusty iron, like information mixed in the air, fills your breath, not evoking the past; it intensifies the present. These materials are not silent. Their surfaces, their warmth, their smells remind you of their presence.

The concrete doesn't tell you anything.

But it doesn't retreat.

The iron doesn't threaten you.

But it doesn't disappear.

In this encounter, fear is not solely yours.

The space carries this feeling with you.

Here, the environment is not a passive background.

The materials accompany the body's reactions; they reinforce some, suppress others. You don't adapt to the space; the space doesn't adapt to you. A temporary balance is established between you.

Within this balance, the space is not alive.

But it acts as if it were alive.

And when you leave, the space hasn't changed.

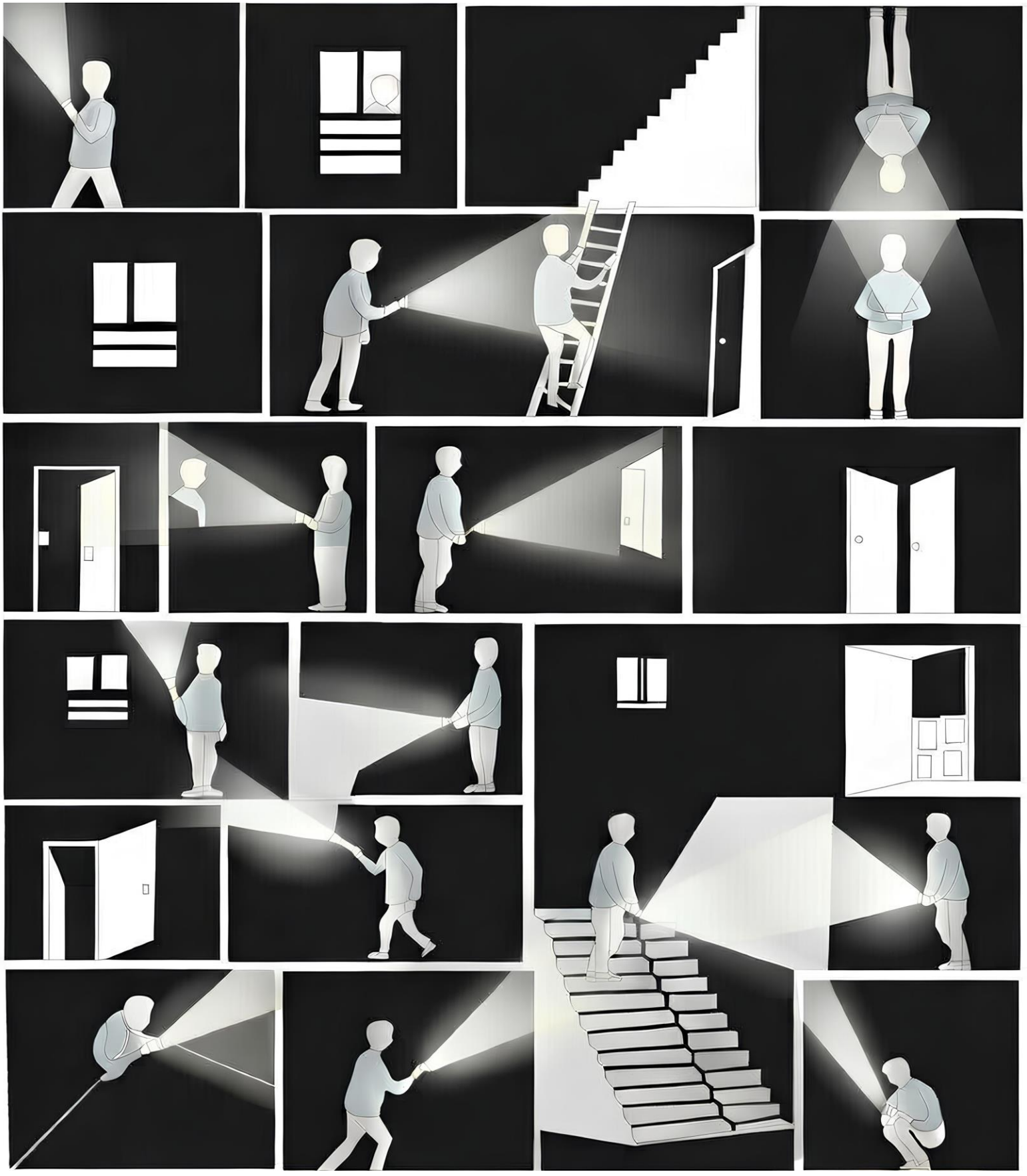


Figure 57. The storyboard of Vignette III, created by the author.

Experiential Dimension	Spatial Occurrence (What occurs?)	Bodily / Interoceptive Effect (What is felt?)	Non_Human Agency (What acts?)	Emergent Relational Response (What emerges?)
Treshold/ Descent	Immeasurable volume; delayed echo; indeterminacy	Racing heart; shortened steps	Vastness, echo, emptiness	The space ceases to be neutral; a potential threat zone emerges
Rhythmic Orientation	Gaze oscillates between shadow and escape	Shoulders close; vigilance, body alert	Shadow, acoustic delay	Rhythm reorganized by fear
Material Continuity & Vitality	Concrete, rust, cold insist on presence	Cold rising through body; metallic air	Concrete slab, iron, smell	Matter accompanies reaction
Temporal Density	The echo is delayed; the moment intensifies	Time stretches; focus sharpens	Delay, emptiness	The moment is compressed into the present; temporal density increases
Diffuse Illumination & Shadow Play	The shadow becomes the focal point; it ceases to be an object	Threat perception	Darkness, corner, contrast	The space transforms into a topography of threat
Reflective / Resonant Ground	Sound arrives late; the void reflects its presence back	Delayed sense of one's own existence	Volume, floor, reverberation	The body appears in space with a delay
Atmospheric Enclosure / Openness	Open field turns into search for shelter	Defensive posture	Cold air, exposure	Openness transforms into a realm of fear; it creates space
Relational Assemblage	Body, material, void, shadow entangle	Fear distributed	Concrete, iron, echo	The space is not alive, but it behaves as if it were; a shared emotional space

Figure 58. The Matrix III, Relational Analysis, created by the author.

Synthesis of Relational Dynamics:

As illustrated in Figure 59, the Relational Intensity Map reflects the key dynamics observed in Vignette III. The Bodily column shows consistently high intensity during the entry and movement phases, highlighting how the body interacts with the environment before conscious thought. Physiological rhythms, such as accelerated heart rate and shortened steps, become primary instruments for navigating the space.

The environment is experienced not as a neutral volume but as a field that shapes and is shaped by bodily responses. Similarly, the orientation and spatial columns peak during moments of uncertainty, corresponding to the vignette's depiction of the shadow concentrating in a corner. Here, architectural elements, walls, openings, and corners interact with the body's anticipation and adjustments, transforming the space from a passive container into an actively negotiated field.

Material and atmospheric factors maintain elevated intensity throughout the Adjustment and Pause phases. The cold concrete floor and the presence of iron influence bodily reactions, creating a temporary balance between human perception and material agency.

Conclusion:

Together, these relational intensities demonstrate how the vignette's experiential observations are captured in the map. High-intensity moments on the map correspond directly to phases in which the body, materials, and spatial configuration engage in mutual modulation, reinforcing the central argument that architecture is co-constituted through relational interactions rather than fixed form.

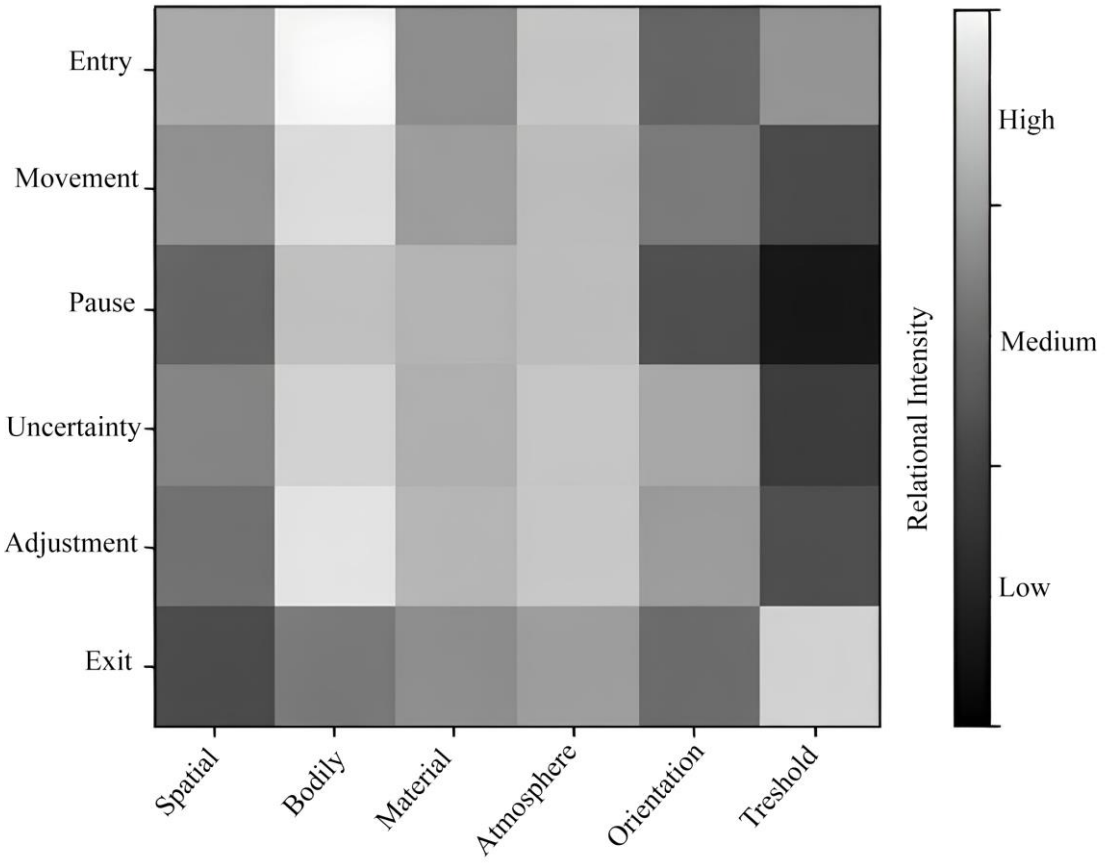


Figure 59. Relational Intensity Map III, created by the author.

Unlike the previous case studies, Vignette III does not correspond to a physical architectural site. It is a deliberately imagined space designed to probe the limits and applications of the methodological framework. While the earlier vignettes examine existing sites, this hypothetical scenario tests how relational readings, the matrix, and the Relational Intensity Map can operate in conditions that are not physically present.

The imagined space allows the methodological apparatus to function prospectively: it demonstrates that the animist lens can guide the understanding and simulation of relational dynamics even in spaces that have not been built. Patterns of bodily response, material agency, spatial orientation, and environmental modulation are treated as analytically legible and comparable, despite originating from narrative and imaginative engagement rather than empirical observation.

Rather than weakening the framework, Vignette III reinforces its flexibility and scope. It shows that architectural experience whether in encountered or invented spaces is always co-constituted through anticipation, bodily engagement, and environmental interaction. The distinction between real and imagined becomes less central than the relational processes themselves, suggesting that the methodology can be applied both to interpretive analysis and generative design exploration.

5.2 Relational Method as Operative Ground

How can we rethink space as a relational existence?

This chapter has established the methodological architecture of the thesis by positioning architecture not as a static object but as a dynamic relational field co-constituted through the continuous interaction of body, material, atmosphere, and environment.

Through the theoretical convergence of animism, phenomenology, embodied cognition, and post-humanist assemblage thinking, architecture has been reframed as a processual condition rather than a fixed form a field in which spatial experience emerges through coupling, modulation, and reciprocal affect. This convergence, however, also requires a critical examination of its own limits. Phenomenology, while powerful in articulating embodied perception and lived experience, tends to privilege conscious, human-centered awareness and therefore struggles to fully account for distributed, pre-reflective, and non-conscious processes through which environments modulate bodily states. Its descriptive richness may illuminate how space is experienced, yet it often remains insufficient in explaining how material and atmospheric forces actively participate in shaping that experience beyond human intentionality. Post-humanist assemblage thinking, by contrast, expands the field of agency across human and non-human actors, but risks analytical overextension when agency becomes so diffusely distributed that distinctions between modulation, influence, and causation begin to blur. In such moments, the framework may shift from explanatory precision toward conceptual affirmation, describing relationality without sufficiently differentiating its operative mechanisms.

Recognizing these limits does not weaken the methodological framework; rather, it sharpens its analytical position by situating relational interpretation between phenomenological experience and distributed material processes, ensuring that the proposed animist lens remains an operative mode of reading rather than a self-confirming theoretical construct.

Across the three case readings, the methodological framework demonstrated its capacity to operate across multiple registers of spatial encounter. The vignettes functioned as perceptual thresholds, suspending representational recognition and foregrounding embodied immediacy. The storyboard decomposed the temporal unfolding of spatial experience, rendering perceptual transitions analytically legible. The matrix traced relational intensities across bodily, spatial, material, and non-human registers, while the Relational Intensity Maps synthesized these dynamics into transferable patterns of coupling and modulation.

The Basilica Cistern revealed architecture as an atmospheric field in which perception is shaped primarily through humidity, darkness, acoustic depth, and environmental density rather than visual clarity. The Cube Houses demonstrated how geometric displacement redistributes agency between body and spatial configuration, transforming orientation into a continuous process of negotiation and recalibration. The imagined third vignette extended the methodological framework beyond empirical observation, demonstrating that relational dynamics remain analytically legible even within speculative spatial conditions. Together, these readings demonstrate that architecture does not operate as a passive container or representational object, but as a responsive assemblage in which human and non-human forces co-produce spatial experience.

Crucially, this chapter does not position animism as an ontological claim regarding the vitality of matter, but as an epistemological lens that renders relational dynamics perceptible and traceable. Materials do not become “alive”; rather, their agency becomes legible as they participate in modulating bodily orientation, perception, and affect. Architecture thus emerges as a condition of co-emergence a distributed relational field in which spatial meaning is enacted through encounter rather than imposed through form.

The methodological framework developed here shifts architectural analysis away from representation, symbolism, and authorial intention toward relational operation, embodied modulation, and environmental interaction.

The comparative framework has been created based on the following:

	Conventional Analysis	**Epistemological Animist Lens**
Primary Focus	Concept, Function, Form	Relational Intensities
The building	Static Designed Object	Dynamic Assemblage
The Inhabitant	Passive User	Affective Body
The Environmental	Context, Site	Agency
Outcome	Object-based Representation	Co-produce Spatial Experience

By stabilizing recurring patterns of coupling across cases, the method establishes a transferable analytical ground that does not universalize experience but renders relational dynamics comparable, traceable, and operational.

This transition is critical. The patterns, intensities, and relational mechanisms identified in this chapter do not remain interpretive; they form the operative foundation for the following chapter, where relational analysis is translated into architectural design principles. Chapter 6 moves from reading to making from relational interpretation to relational production, transforming the animist lens into a set of open, adaptive, and designable spatial operations. Architecture is no longer examined as an object of analysis, but activated as a field of relational construction within this operative shift. The Relational Intensity Map functions not merely as an analytical representation but as a feedback instrument guiding design intervention. Variations in relational

density reveal where coupling between body, material, atmosphere, and spatial configuration weakens or intensifies. When bodily engagement registers low intensity, this signals not an absence of experience but a spatial condition in which material, atmospheric, or geometric parameters insufficiently modulate embodied perception.

In such cases, operational recalibrations including the adjustment of surface tactility, compression–expansion sequences, threshold density, light gradients, atmospheric resistance, or spatial rhythm may be deployed to amplify relational coupling.

The map thus operates prospectively: not only describing how space acts, but indicating how it may be tuned, thickened, destabilized, or intensified to enhance animistic relationality. Rather than prescribing fixed forms, it enables an adaptive design logic in which spatial and environmental variables are continuously recalibrated according to their relational effects, allowing architecture to emerge as a responsive field of co-constitution rather than a predetermined object.

Chapter 6

Discussion: Architecture as a Living Interface from an Animist Lens

> " *The universe was folded in upon itself: the earth echoing the sky, faces seeing themselves reflected in the stars, and plants holding within their stems the secrets that were of use to man*"
>
> — Michel Foucault, 1966

This chapter proposes the notion of architecture as a living[19] interface. This does not imply that architecture is alive in a biological sense, but rather serves as an epistemological framework for understanding the dynamic relational processes that shape our spatial experiences.

The argument of the thesis does not synthesize a unified theoretical ontology. Instead, it purposefully engages a variety of ideas from diverse disciplinary backgrounds and conceptual frameworks.

Theoretical Positioning:

This thesis is structured at the intersection of the following four theoretical pathways;

I. Animism is treated not as a metaphysical doctrine, but as an epistemological lens. Instead of assuming that matter is inherently alive, this viewpoint enables an analysis of how spatial

[19] The term "living" is used here to emphasize characteristics such as responsiveness and continuous interaction.

configurations are perceived as responsive within relational contexts. The emphasis is not on the ontological claim of animism, but on perceived relationality and affective coherence.

Anthropological structuralism and post-structuralism, represented by thinkers like Claude Lévi-Strauss and Philippe Descola, examine how cultures classify relationships between humans and non-humans. Actor-network theory, led by Bruno Latour, reinterprets agency as something that is distributed across heterogeneous assemblages. Object-oriented and ecological philosophies, such as those proposed by Timothy Morton, problematize anthropocentric ways of thinking, while perspectival anthropology, exemplified by Eduardo Kohn, explores how life and meaning-making extend beyond the human realm.

These positions remain distinct in scope, intention, and metaphysical commitment. Their cumulative use here is not meant to produce conceptual consensus, but to reveal different dimensions of relationality: classificatory, ecological, and semiotic. The framework that emerges is therefore not an ideological collage, but a structured dialogue between approaches.

Within this dialogue, animism is treated as an epistemological lens. In this discussion, animism is approached as an epistemological lens that allows us to explore how particular configurations of relations can be perceived as responsive or agentive in specific cultural and perceptual contexts. This research does not affirm animism as ontology; it analyzes it as a mode of relational world-description.

II. Phenomenology, especially the traditions focused on embodied perception, grounds the discussion in situated experience. In this direction, spatial meaning is not predetermined; instead, it emerges from our lived experiences, bodily orientation, and sensory experience. Architecture, in this sense, operates within the horizon of embodied presence.

III. Neurophenomenology establishes a methodological dialogue between lived experience and cognitive science without reducing one to the other. It proposes tools for relating first-person experience to biological processes while preserving their epistemic distinction. Insights from embodied cognition and neuroscience enhance our understanding by emphasizing the roles of interoception, predictive processing, and pre-reflective attunement. Spatial experiences involve not just perception, but also bodily regulation, anticipatory responses, and emotional modulation. Architecture plays a significant role in shaping our bodily expectations and emotional responses even before we engage in conscious interpretation.

Neurophenomenology does not prove animism, nor does it validate any metaphysical claim about matter.

IV. Posthumanist assemblage theory contributes the concept of distributed agency. Agency is understood analytically as emerging across networks that include human bodies, materials, technologies, and environmental systems. This does not imply that materials possess subjectivity; rather, it emphasizes how spatial effects are co-produced by various heterogeneous elements.

Ultimately, Phenomenology, neurophenomenology, and posthuman assemblage theory are employed in this research as complementary perspectives that help to reveal different dimensions of relational spatial experience. Together, these perspectives support but do not replace the animist epistemological lens that structures the thesis.

Conceptual Transformations:

This epistemological reframing produces three key conceptual transformations in the interpretation of modern architecture.

From Object to Field: Architecture is viewed not as a fixed entity but as an open relational network.

From Representation to Intra-active Entanglements: Meaning is not embedded in form; Instead, it emerges from the experiences gained through encounters.

From Human Agency to Relational Distributed Agency: Spatial experiences are co-produced by both human and non-human actors.

This epistemological shift makes the framework applicable beyond specific locations, enabling relational analysis to function across both existing and imagined spaces.

When architecture is approached through what can be described as an animist lens, spatial elements begin to appear differently within experience. A wall, for instance, is no longer perceived solely as a static barrier, but can be understood as a responsive surface that mediates relations among wind, light, temperature, material transformation, and the moving human body. In this interpretive frame, space appears not as a passive container but as an active participant in experiential processes.

This perspective does not attribute life to architecture; rather, it reveals the vitality that becomes perceptible when architectural phenomena are approached through an animist mode of perception. By reframing how architecture is read and experienced, this lens opens new conceptual and design possibilities, inviting architecture to be engaged not merely as an object of control but as a living interface of relations.

6.1 Toward an Operative Animism: Epistemological Implications in Architecture

For architecture to operate as a living interface, this research introduces three essential epistemological criteria that can be used to understand and potentially design architectural situations. These criteria are intended as analytical tools rather than claims about matter possessing inherent life, subjectivity, or intentionality. These criteria for a *Living Interface* are as follows:

I. Capacity to be affected;

Architectural elements and spatial assemblies can adapt to variations in the environment, materials, time, and human activity, such as changes caused by weathering, light, humidity, and the rhythms of users.

This adaptability enables architecture to interact with these influences without becoming rigid or fixed.

II. Capacity to distribute response;

Responses may develop relationally and, depending on the situation, through ongoing intra-actions rather than through pre-planned programming or fixed representational intent.

In this respect, the architectural interface can be understood as "responding" through distributed performativity rather than through a single central agency.

III. Capacity to co-produce experience;

Spatial meaning, atmosphere, and affect can emerge from continuous embodied engagement rather than being entirely predetermined within form or enforced through human intention.

When considered together, these criteria can function as both analytical lenses for interpreting existing architectural conditions, as discussed in Chapter 5, and generative principles for future design speculation.

This thesis fulfills these criteria through four operative modes:

Mode I: Reciprocal Modulation,

Mode II: Perspectival Multiplicity,

Mode III: Entangled Vitality,

Mode IV: Embodied Reciprocity.

These modes function as analytical descriptors of observable spatial behaviors through which architecture can be understood to operate as a living interface. Instead of defining the fixed properties of animist environments, these modes are proposed as interpretive tools that enable the reading and reflection of relational spatial dynamics.

The framework intentionally departs from earlier approaches in animistic design discourse.

Marenko and van Allen (2016) propose principles for digital "*AniThings*, " such as heterogeneous multiplicity, embodiment, the notion that the human is smart, and distributed cognition, focusing largely on human–nonhuman relations within digital and technological ecologies. Similarly, Eren (2019) identifies several characteristic features of "animistic spaces" that function as descriptive categories for recognizing animistic qualities in spatial environments: " *agency, interaction, embodiment, ecology, and ambiguity.*"

While these contributions establish significant conceptual grounds for animistic thinking in design, they tend to operate either as frameworks oriented toward digital object ecologies or as descriptive taxonomies.

The present research proposes an alternative disciplinary articulation by transforming animistic thought into a set of operative spatial modes specifically aligned with architectural practice.

The four modes synthesize relational, temporal, and embodied aspects of spatial experience and articulate them as practical conceptual tools for both analyzing and designing space. In this context, the disciplinary contribution of the thesis consists not in asserting the ontological reality of animism but in offering a framework that expands the epistemological and projective capacities of architectural thinking.

Through these modes, animistic relationships are examined as spatial dynamics that can be analyzed, interpreted, and utilized within architectural design processes.

Each mode, therefore, operates on two levels: first, as an analytical lens through which spatial relations can be read and interpreted; and second, as a design orientation that proposes possible strategies for architectural intervention.

Mode I - Reciprocal Modulation: Environment as Co-Author

As an analytical lens, Reciprocal Modulation conceptualizes the relationship between space and subject as a dynamic, co-constitutive process. Instead of examining the built environment as a passive backdrop for human activity, this mode reads architectural space and social action in a state of continuous mutual adjustment. Architecture functions as an active relational mediator

that structures behavior and perception, while simultaneously being redefined and reshaped by the rhythms of occupation and the evolving needs of its users.

As a design orientation, it positions the environment as a co-author rather than a mere site of intervention. By integrating the agency of light, climate, temporal responsiveness, and material performance, architectural strategies shift from rigid predetermination. In this framework, the built form is not a finished product but a responsive system that evolves through its ongoing interaction with temporal and environmental forces.

Mode II - Perspectival Multiplicity: Distributed Perception

As an analytical lens, Perspectival Multiplicity examines the capacity of space to generate multiple and shifting viewpoints. Rather than assuming a singular, privileged vantage point, this lens foregrounds the coexistence of diverse perceptual subjectivities ranging from the human and non-human to the mobile and the situated.

As a design orientation, this mode moves beyond the static image to cultivate plural perception. By utilizing layered spatial sequences and distributed sensory cues, the design produces environments that resist a definitive reading, instead fostering a dynamic field of interpretation and experience.

Mode III - Entangled Vitality: Matter as Participant in Spatial Dynamics

As an analytical lens, Entangled Vitality functions as an analytical framework that foregrounds the agency of material processes within the built environment. Rather than treating matter as an inert or passive substrate, this lens conceptualizes architectural space as a dynamic assemblage of living and non-living components perceived in terms of vitality. By emphasizing the transformative capacities of weathering, biological growth, and decay, this perspective reads

material transitions not as a loss of form, but as active contributors to the spatial life and ongoing evolution of a site.

As a design orientation, this mode encourages designers to engage with materials as dynamic participants rather than static, inert components. By prioritizing material responsiveness and temporal transformation, this approach shifts the focus from the finished object to an ongoing process of spatial formation. Architecture is thus conceived as a performative assembly, where the inherent properties of matter and its ecological integration actively contribute to the continuous reconfiguration of the built environment.

Mode IV - Embodied Reciprocity: Experience as Co-Production

As an analytical lens, Embodied Reciprocity interrogates the co-constitutive relationship between corporeal experience and spatial configuration. Rather than viewing the body as a detached observer, this framework posits that perception, movement, and sensory engagement are dynamically co-produced through the interaction between the physical self and the built environment. In this sense, the spatial logic of a site is not merely seen but "lived," as the body and space continuously inform and recalibrate one another.

As a design orientation, this mode prioritizes active corporeal engagement. By strategically manipulating scale, tactility, and the transition of thresholds, the design moves beyond the visual to foster a haptic dialogue with the occupant. In this framework, spatial experience is not a static image to be viewed from a distance; rather, it is a dynamic outcome that emerges through the choreography of movement and the sensory interaction between the body and its environment.

Chapter 7

Conclusion: Reframing Architectural Space

Animism emerges as a critical conceptual lens that renders the relational dimensions of spatial experience more perceptible and intelligible. While phenomenology foregrounds embodied perception and posthuman approaches emphasize distributed agency and networks, animism extends these frameworks by articulating spatial experience as a field of reciprocal engagement among humans, materials, environments, and other entities.

Building on this perspective, the research reintroduces animism from an anthropological perspective, often described as primitive and previously overlooked or marginalized, into architectural discourse as a relational framework for engaging with invisible and intangible forces embedded in spatial practice. In doing so, it establishes the conceptual backbone of the thesis.

This thesis aims to reconceptualize architecture not as a static object, but as a dynamic, relational, and responsive "*living interface*." By positioning animism as an epistemological lens, the thesis proposes to examine the experience of architectural space through relational, distributed agency and bodily perception. This approach questions the object-centered, representational, and human-centered paradigms that dominate architectural theory, considering space as a continuous, intra-active process of becoming.

The primary contribution of this thesis consists of the development of an original epistemological framework for architecture, structured around three fundamental criteria:

I. Capacity to be affected
II. Capacity to distribute response
III. Capacity to co-produce experience

These criteria enable an analytical reading of architectural elements in terms of their reciprocal interactions with environmental, temporal, and bodily forces.

To operationalize these criteria, four modes have been developed: *Reciprocal Modulation, Perspectival Multiplicity, Entangled Vitality, and Embodied Reciprocity*, providing a discipline-specific vocabulary for architecture.

These modes function both as a means of interpreting existing spatial conditions and as guiding principles for future design speculations.

This epistemological shift proposes the following contributions to architectural theory:

First, it shifts the role of the architect from that of an "absolute controller" to a relational facilitator, repositioning the design process as an exercise in choreographing interactions between environment, materials, and human actors rather than merely shaping formal outcomes.

Second, sustainability is redefined: instead of being approached solely as a technical metric such as carbon footprint or energy certification, the *Entangled Vitality* mode positions it as a living connection between the building and its surroundings, where material aging, corrosion, and temporal changes are read not as flaws but as evidence of ongoing ecological dialogue.

In dialogue with posthumanist thought, this thesis expands traditional phenomenology, often anthropocentric in the work of theorists such as Pallasmaa or Heidegger, through the *Perspectival Multiplicity* mode. Space is no longer designed exclusively for the human eye but as an interface for non-human agents, including light, wind, other living beings, and technological sensors.

Similarly, architecture is reconceptualized from a static object into an intra-active process of becoming: spatial experience is generated in real time, emerging through the user's movement, the material's temperature, and shifting light, transforming architecture into a temporal and performative.

In this direction, the four operative modes developed in this thesis provide new analytic vocabulary for architects. This framework shifts critical evaluation from conventional questions of beauty or functionality toward inquiries such as *"How affectable is this interface?" "What is its capacity to respond?", and "How does it co-produce experience?"* Together, these contributions advance a relational, sensory, and posthumanist understanding of architecture.

This epistemological framework, however, is not limited to the domain of physical architecture. Because it conceptualizes space as a relational and responsive interface rather than a static object, its principles can extend to environments where spatial experience is dynamically produced through interaction.

This operationalization has been demonstrated through the relational case readings conducted in Chapter 5. By tracing spatial interactions across human, material, atmospheric, and non-human registers, the Relational Intensity Maps provided a transferable analytical ground for understanding how architecture can function as a living interface. The Basilica Cistern, Cube Houses, and the speculative vignette exemplified how space can be understood not a static object but a responsive field, in which relational dynamics are perceivable and designable. These readings underscore that the animist lens, while epistemological rather than ontological, can guide both analytical interpretation and adaptive design interventions.

In this way, architecture is not merely observed but actively engaged, revealing how spatial experience emerges through the continuous interplay of materiality, embodiment, and environmental conditions.

This framework extends beyond physical architecture and has significant potential in digital and immersive technologies. Specifically, virtual reality (VR), extended reality (XR), and immersive environments emerge as contexts where the concept of the "*living interface*" can be most directly experienced.

Within XR environments, space can be constructed through coded responsiveness, algorithmic modulation, and perspectival multiplicity. AI agents can be positioned as "*animistic familiars*," intensifying the user's embodied interaction through a pre-reflective experiential layer. In this sense, immersive technologies propose a ground for exploring and testing frameworks in both experimental and applied contexts. They provide opportunities to examine how responsive environments, algorithmic behaviors, and non-human factors can co-produce spatial experience.

The limitations of this thesis also stem from its epistemological caution. By deliberately avoiding ontological claims, the framework focuses on how architecture can be perceived as living, rather than on whether it is literally alive.

Moreover, the framework remains primarily theoretical. As such, how these modes might be tested, translated, or operationalized within concrete design processes remains unexplored. This limitation simultaneously opens a productive avenue for future research.

Ultimately, reading architecture as a "*living interface*" invites a shift in perspective: rather than simply constructing space, it encourages thinking in terms of coexistence, mutual influence, and co-production with the built environment. In this sense, architecture's future may lie not in the creation of static objects but in cultivating responsive relational systems networks that continuously interact, transform, and are themselves transformed.

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