

ATMOSPHERIC SPACES

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ELISABETTA CANEPA

# ARCHITECTURE IS ATMOSPHERE

NOTES ON EMPATHY, EMOTIONS,  
BODY, BRAIN, AND SPACE

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## ATMOSPHERIC SPACES

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### What is an “Atmosphere”?

According to an aesthetic, phenomenological and ontological view, such a notion can be understood as a sensorial and affective quality widespread in space. It is the particular tone that determines the way one experiences her surroundings.

Air, ambiance, aura, climate, environment, genius loci, milieu, mood, numinous, lived space, Stimmung, but also Umwelt, ki, aida, Zwischen, in-between – all these words are names hiding, in fact, the founding idea of atmospheres: a vague ens or power, without visible and discrete boundaries, which we find around us and, resonating in our lived body, even involves us.

Studying atmospheres means, thus, a parte subjecti, to analyse (above all) the range of unintentional or involuntary experiences and, in particular, those experiences which emotionally “tonalise” our everyday life. A parte objecti, it means however to learn how atmospheres are intentionally (e.g. artistically, politically, socially, etc.) produced and how we can critically evaluate them, thus avoiding being easily manipulated by such feelings.

Atmospheric Spaces is a new book series whose aim is to become a point of reference for a community that works together on this philosophical and transdisciplinary subject and for all those whose research, more broadly, is involved in the so-called “affective turn” of the Social Sciences and Humanities.

ELISABETTA CANEPA

# ARCHITECTURE IS ATMOSPHERE

Notes on Empathy, Emotions,  
Body, Brain, and Space

Foreword by Tenna Doktor Olsen Tvedebrink

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TENNA DOKTOR OLSEN TVEDEBRINK  
FOREWORD

*Atmosphere.*

It is a poetic and vibrant word. An intriguing term. It is omnipresent. Universally recognised, it is an integral part of everyday vocabulary.

Yet atmosphere is a concept many students of architecture, design, and building engineering regard rather complex and difficult to grasp, discuss, and implement in their design processes. As an academic researcher and university teacher, I often hear complaints that the notion is too intangible, unstable, and subjective. Students find it nearly impossible to identify and measure. They struggle with translating it into concrete terms at the different design phases. Even some academic colleagues consider it a vague expression, which explains why it is frequently ignored or downplayed in both teaching and research.

With this book, Elisabetta Canepa continues a central theme in the literature on architectural theory, namely, understanding and debating the essence of atmosphere in architectural thinking. In this way, she builds on the work of Peter Zumthor, Juhani Pallasmaa, Gernot Böhme, Tonino Griffèro, Alberto Pérez-Gómez, Harry Francis Mallgrave, and Sarah Robinson; not to mention that of Steen Eiler Rasmussen.

Departing from these architectural theoreticians, Canepa re-contextualises the question of atmosphere. She achieves this using an original and rigorous scientific approach, with the twofold aim of overcoming the vague character that the topic currently suffers from and comprehending the deeper meaning and functioning mechanisms of the term.

With the fascinating title *Architecture is Atmosphere*, Canepa emphasises the interesting point that a building is not merely an aesthetic object to visually adore, or a functional container to spatially optimize and occupy.

Rather, architecture *is* atmosphere — a phenomenon the human body perceives and empathise with on an emotional level. In other words, she highlights the importance of perception and sensory stimuli — and places lived experience and emotions at the fore.

In that sense, Canepa focuses attention on phenomenology and embodiment paradigm, in particular, incorporating elements of (neuro) biology and cognition — how human emotions, brains, and minds engage with the built environment —, to expand existing architectural theoretical frameworks.

In the last few years, the field of architecture has become increasingly attuned to the rapid developments in neuroscience and cognitive science. Of noteworthy interest is how technological and digital breakthroughs have made it possible to explore and test the human body and human experiences. These recent research achievements offer a series of innovative insights into architectural thinking. Canepa acknowledges these scientific implications and applies them to scrutinize the potential and limits of the topic of atmosphere. Her book provides, on the one hand, a significant introduction to and overview of the architectural literature debating the concept of atmosphere — from the early writings of Gottfried Semper and the later ones of Aldo Rossi and Christian Norberg-Schulz, to the more contemporary work of Tim Ingold. On the other hand, it is an exciting exploration of a new theoretical framework, outlined by five overall stages: *definition, evolution, mapping, revival, and scientific grounding*.

In summary, this volume helps clarify and categorise the notion of atmosphere in architecture. Furthermore, it aids to navigate the vast amount of literature (and design pathways) that exist on the topic. I admire Elisabetta Canepa for embarking on such a difficult journey, and I heartily recommend her work to all those who seek advice on the experiential qualities of architecture.

This book stands out to me as being a future key reference in architectural teaching and research on atmosphere. It is pertinent for both the novice student and the more experienced scholar.

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*December 2021*

## PREMISE

When we enter a room, we become aware of the atmosphere.

Every contact with the vibrant sensoriality of a place generates atmospheric epiphanies — more or less intense, more or less engaging, and more or less intelligible — that resonate with the personal sensibility of the individual. It is there, we suppose, the release of empathic symbiosis with the space in which we are immersed occurs. It is there that the experiential vocation of architecture takes form. It is there that the nebulous dimension of architectural atmospheres gets embodied, namely the dimension of the ineffable and ephemeral par excellence, what is impalpable and emotional, subjective and barely hinted. A condition that is apparently indeterminable, elusive, and without possible definition. To attempt to understand the meaning and functioning mechanisms of the atmospheric resource in the architectural field is the aim of this book.

Encroaching on other disciplines, such as aesthetics, phenomenology, and cognitive science, leads to striking out in new directions to find help in unravelling the enigma of atmosphere in architecture. The core, around which this journey through the maze of architectural poetics gravitates, seeking the expressive qualities of the built space,<sup>1</sup> is the *body* — root

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1 This book is a development of the author's doctoral research (Canepa 2019). The thesis *Neurocosmi: La dimensione atmosferica tra architettura e neuroscienze* ("Neurocosmos: The Atmospheric Dimension between Architecture and Neuroscience") was defended in May 2019 at the Department of Architecture and Design (dAD) of the Polytechnic School of Genoa, under the supervision of Valter Scelsi (architect and professor of architectural and urban design at dAD) and Anna Fassio (professor of human physiology and neurophysiology at DIMES — Department of Experimental Medicine, School of Medicine, University of Genoa). To conduct the final experiment, she also sought the collaboration of Laura Avanzino, neurologist and professor of neurophysiology, and Giovanna Lagravinese, psychologist and researcher — both belonging to DIMES.

and threshold of lived experiences. The exploration follows the steps dictated by a prototypical compass, intentionally assembled to navigate vagueness. Since it seems hard to glimpse a way through atmospheric vagueness, the philosopher Tonino Griffero, to whom we will often ask advice on this expedition, urges us — at least — “to stay in it in the right way” (2014a, 7).

As the German philosopher Karsten Harries (b. 1937) observes, “the need for building cannot be reduced to the need to achieve physical control of the environment” (1983, 16). Indeed, architecture, or rather the art and science of manipulating our surroundings, “produces atmospheres in everything it creates” (1991, 36), states Gernot Böhme (1937–2022), who shares Harries’ nationality, profession, and year of birth.

It does, of course, solve objective problems and build objects, buildings of all descriptions. But architecture is aesthetic work inasmuch as rooms and space are always created with a specific quality of mood and hence as atmospheres. (Böhme 1991, 36)

Architecture is a complex process of spatial organisation, which is conceived, developed, felt, and communicated also (and above all) by means of its atmospheric manifestations. To tackle the nuanced and fleeting nature of the atmospheric event,<sup>2</sup> I have proposed registering a semantic definition, with which to formalise such an intrinsically vague notion, up to now hatched from architectural knowledge for the most part through metaphors and “ineffable”<sup>3</sup> expressions. Almost by paradox, I

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2 See the first four chapters of the book. Chapter I “A Definition Lacking Definition” introduces the atmospheric issue within the architectural discipline, analysing its elusive essence: atmosphere is a complex phenomenon because it is invisible, intangible, without physical limits, multifaceted, unstable, highly subjective, often depicted by way of allusion, and still not structured in a recognised and shared architectural theory. — Chapter II “Roots” reconstructs the genealogy, evolution, and semantic network of the word “atmosphere,” with particular attention to the architectural domain. — Chapter III “Atlas of Atmospheres” outlines a map to collect the miscellany of interpretations and uses of the atmospheric concept forged by the architectural culture over time. — Chapter IV “Atmospheric Revival” sheds light on the current phase of atmospheric stirring that inflames architecture, emphasising the urgency of finding a clear understanding of the atmospheric topic in the architectural context.

3 The reference is to the locution “ineffable space,” coined by Le Corbusier (1948).

have synthesised a formula that follows *scientific criteria*.<sup>4</sup> Atmosphere becomes a describable and even potentially measurable entity — that can be submitted to assessment by experimental protocols (Canepa et al. 2019).

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4 See chapter V “To Perceive the Invisible,” which recreates a critical framework for setting up an architectural theory of atmosphere of an experiential identity, inspired by notions of a (neuro)biological origin — derived from a previously metabolised transition of the phenomenological and aesthetics repertoire. Specifically, four scientific principles are examined: the multisensory nature of spatial perceptual processes; the dynamics of embodiment, which highlights the crucial role of the body-brain-mind unit entrenched in its environment of movement and interaction; the emotional content of the architectural experience; and the phenomenon of emotional and physiological empathy.