

# Framing the Body-Space Relationship to question Research and Practice

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## GROUNDING THE BODY-SPACE RELATIONSHIP TO CONTEMPORARY INTERNATIONAL DEBATE

The relationship between bodies and space lies at the heart of spatial studies, from architecture to urban and environmental design, planning and policies, artistic disciplines and experimentation. Both ancient and persistently new, it is shaped by cultural codes, contextual conditions, social structures, and individual and collective practices (de Certeau, 1984).

In recent decades, the increasing dematerialisation of spatial experience through digital and remote technologies has destabilised this nexus, posing new ontological and operational challenges for spatial disciplines. The dialectic between corporeality and environment, once grounded in proximity, materiality, and sensory perception (Merleau-Ponty, 1945/1962; Pallasmaa, 1996), now requires

a critical rethinking in the context of virtuality, hyper-mediation, and ecological crisis.

As Maurice Merleau-Ponty observed, "the body is our general medium for having a world" (1962, *Phenomenology of Perception*), an active interface through which space is both perceived and produced. Similarly, Henri Lefebvre (1991, *The Production of Space*) conceptualised space as socially constructed and performative, inseparable from the practices and bodies inhabiting it. So that the body is not merely a vessel but an active agent of perception, affect, and political meaning.

In dialogue with these positions, Gilles Deleuze's reading of Spinoza emphasises the body as both acting and acted upon: "we do not know what a body can do" (Deleuze, 1988), highlighting the dynamic potential of corporeal agency and its susceptibility to environmental conditions (Bianchetti, 2020). The body is simultaneously shaping and shaped by its

environment, and this reciprocal dynamic persists, though its forms evolve.

In response to these transformations, the EURAU Milan 2024 Conference, held in June 2024, explicitly addressed this problem in a context marked by post-pandemic reflections, ecological urgency, and pervasive digitalization (Awan et al., 2011; Rendell, 2007). Structured around five thematic areas - conceived, interactive, affected, vulnerable, and augmented - through 185 contributors and panelists, the conference interrogated the persistence, transformation, and possible obsolescence of corporeal presence in spatial practices.

The investigation was structured around five thematic areas: conceived opened the debate to theoretical elaborations transcending the metric-functional tradition (Tschumi, 1994), investigating bodies as affective, performative, and socio-political agents. Inter-active explored how embodied gestures and sensory engagements remain irreplaceable in producing spatial meaning, affected addressed the environmental and climatic impact on bodies, reinforcing recent scholarship on environmental vulnerability. Vulnerable highlighted inequalities of access and exposure within architectural and urban environments, aligning with critical studies emphasising spatial justice. Finally, augmented examined the interplay of corporeal bodies with digital extensions and AI-mediated environments, reflecting ongoing debates on posthuman ecologies and techno-social spatialities.

Basically, this UOU issue, a sort of derived, expanded and deepened elaboration of EURAU Milano 2024, reaffirmed the importance of 'togetherness', the co-presence of bodies in space as both a social value and a tool for rethinking spatial practices in an age of crises and transition.

Echoing global agendas on sustainability, equality, and care, the Journal Issue

positioned the corporeal not as a nostalgic attachment to the physical but as a vital locus for imagining inclusive, just, and sensorially rich spatial futures.

After a new Call, this UOU issue has identified ten outstanding articles and seven project contributions which address the complex and crucial relationship between space and the body within the fields of architecture, urbanism, environmental studies, and landscape design.

Collectively, they highlight how the relationship between space and the body is not a peripheral concern but a fundamental condition for understanding, designing, and transforming contemporary environments (Pasqui, 2018). They show how spatial practices and theories, when attentive to embodied experience, can engage with a wide range of contemporary challenges - from political to ecological, from the situated to the digital - revealing new, urgently needed trajectories for design research and practice.

The articles are organised into three thematic sections, each offering a distinct lens through which to explore this relationship and its broader implications.

The first group examines the foundational dimensions of the space-body relationship. These contributions investigate how memory, perception, and lived experience are mediated by spatial conditions, offering arguments to foreground the embodied nature of spatial experience.

The second section gathers philosophical and theoretical reflections that deepen the discussion of embodied perception.

The third group brings together applied contributions positioned at the intersections between spatial disciplines and other fields, social, artistic, technological, and political, opening new spheres for research and action.

## THE FOUNDATIONAL BODY-SPACE RELATIONSHIP LENS (I)

Elif Cemre Çelikcan and Aslihan Şenel, in "Wandering Virginia Woolf's Home Through Spatial Correlators of Autobiographical Memory", offer a compelling investigation into the reciprocal relationship between autobiographical memory and architectural space. The hypothesis is that specific architectural elements, doors, windows, and staircases, are pivotal spatial correlators in forming and retrieving autobiographical memory. Through a nuanced reading of Virginia Woolf's memoir "A Sketch of the Past," the study deconstructs Woolf's spatial narratives, seeking to reveal how embodied experiences are encoded, triggered, and represented in memory via spatial situations anchored in these architectural features.

The research methodically transcribes and categorizes the spatial situations recounted by Woolf, mapping them onto a hypothetical isometric reconstruction of her childhood home.

The analysis draws on philosophical and psychological theories of memory to examine how spatial experience is not merely a backdrop to autobiographical recollection, but an active constituent shaping the very texture of memory itself and building elements are not only as physical mediators but cognitive anchors that structure the narrative flow of personal memory.

Through this interdisciplinary approach, the paper advances the argument that spatial situations created by architectural elements not only individualise and enrich lived experience but also facilitate memory encoding and subsequent recall. The findings suggest that even everyday spaces acquire mnemonic power through the bodily actions and affective states

they evoke.

By foregrounding the complex entanglement of architecture, perception, and memory, the authors provide a valuable alternative methodology for architectural research, highlighting the capacity of literary works to serve as archives of spatial experience. In doing so, the article opens new perspectives for understanding the subjectivity of spatial perception and offers critical insight into the broader discourse on the body, memory, and architectural design.

Through "The Anatomy of Experience. A Perspective through the Body-Space Interaction", Gamze Şensoy Torun investigates how the pervasive influence of digitalization is transforming the nature of human experience, with a particular emphasis on the interplay between body and space. The core idea is driven by the hypothesis that digitalization intensifies the disappearance of authentic experience, rendering individual life increasingly discontinuous and detached from direct engagement with the environment. The study, grounded in phenomenological traditions, employs an empirical method in which thirty university students walked an urban route and reported their perceptions, emotions, and memories. Through qualitative analysis, five central experience components emerged: establishing meaning, randomness, remembering, sense, and feeling.

The findings underscore the centrality of multisensory dimensions, particularly visual and emotional responses, in shaping spatial experience, while also demonstrating the crucial role of memory and unpredictability. The body is repositioned from an active agent of meaning-making and presence to a largely passive observer, traversing preordained spatial and experiential landscapes. Recalling Pallasmaa, the discussion reveals that the proliferation of digital interfaces and the growing dominance of vision flatten the richness of multiple sensory engagement and reduce the depth

of emotional resonance.

The hybridization of the body, examined through the lens of posthumanism and cyborg theory, further complicates the distinction between organic and technological, rendering the boundaries of bodily experience ever more fragmented. While digital technologies broaden cognitive and sensory horizons, they also risk abstracting expertise to the extent that immediacy and unpredictability are diminished. The analysis thus critiques the contemporary erosion of experience and calls for an architectural and urban sensibility attuned to the complexities of bodily and spatial interaction in the digital age.

In "Bodies in the Void. Temporary Practices in Terrain Vague Sites", Krystallia Kamvasinou and Lorenzo Stefano Iannizzotto investigate the nature and potential of Terrain Vague. Building on de Solà-Morales' seminal reflections and subsequent theoretical developments, neglected and ambiguous urban spaces are reinterpreted as conditions rich in latent possibilities. Because of their indeterminate nature, the authors demonstrate how crucial they are in fostering an open, innovative approach to urban transformation through temporary and embodied practices.

Within a wider European context, the article examines two illustrative cases. Cody Dock in East London is a long-evolving, community-driven regeneration initiative that has been transforming a disused industrial dock into a lively space for ecology, arts, and collective wellbeing through gradual, participatory placemaking. Meanwhile, LABIC Barreiro Velho, in post-industrial Portugal, is a temporary civic innovation laboratory that activates urban voids through collaborative mapping, community mobilisation, and tactical interventions. As marginal spaces detached from conventional urban order and planning frameworks, Terrain Vague sites become fertile grounds for informal, creative, and corporeal practices.

Here, bodies move, gather, and

perform freely, tracing new routes and meanings.

This contribution draws insight related to urban design methodologies since, rather than imposing pre-designed plans, the projects evolved through incremental, collaborative actions rooted in the direct, embodied experience of the place.

In a time marked by rapid urbanisation and ecological uncertainty, these in-between spaces offer vital opportunities for experimentation, collective imagination, and reclaiming public agency, where new forms of civic engagement and social narratives are enacted through the presence and movement of bodies in space.

## THE THEORETICAL BODY-SPACE RELATIONSHIP FRAMEWORK (II)

In **"Touching the Surface - Application of 'Nahsicht' theory of Alois Riegls in Architecture Composition"**, Yue Zhong critically explores the relationship between visual and tactile perception in contemporary architecture, advocating for a reconsideration of space as an embodied and multisensory experience.

This theoretical reflection aims to update the concept of Nahsicht (aesthetics of proximity) developed by A. Riegl starting from 1901, while drawing on the insights from other scholars such as Pallasmaa and Crary.

The author contrasts the optical and detached mode of perception, typical of a contemporaneity characterised by a deluge of images and a 'retinal' experience of architecture, with a more intimate visual-tactile experience, rooted in proximity, material consistency and corporeal presence. In this view, architecture is repositioned not only as a visual artefact but as a medium through which the body can experience the world.

The reflection is structured around

three key design parameters: Materiality, Touchable scale and Disturbance in surface recognition. Natural materials and textures evoke deep, often unconscious, bodily memories, while spatial scale modulates the intensity of tactile perception. Furthermore, spatialities that resist immediate comprehension provoke heightened sensory awareness, breaking down conventional visual cognition and reactivating haptic sensitivity.

At the root of this view is the idea that by incorporating visual-tactile strategies into the design process, architecture can foster emotional resonance and counteract the sensory impoverishment of standardised environments. Ultimately, this approach advocates for a more empathetic and neurodiverse spatiality, grounded in the phenomenological richness of lived experience.

**"A Paradigm of the Contemporary City: Temperature as Embodied Perception"** by Francesca Melina, questions the possibility of rethinking and inhabiting space through the lens of the bodily and dynamic interaction between humans and the environment. The aim is to identify spatial forms and practices capable of reversing the theoretical foundations of the idea.

Acknowledging a growing disconnect between living beings and the physical realms, the author highlights a renewed emphasis on the body and materiality, embracing the concept of the Anthropocene as a turning point capable of informing a new attitude in addressing social, political and epistemological problems of the climate crisis.

At the core of this reflection is a new paradigm centred on the body (individual, social and cultural), positioned as a valuable conceptualisation in addressing emerging urban and ecological challenges.

The exploration of the human-environment relationship through environmental temperature tool, encompassing human, non-human and material bodies dynamics,

highlights the significance of residual spaces and art-architectural practices as starting points for developing new ways of inhabiting the world. Reactivating "unseen" spaces through performance installation and transitory architectures is proposed to foster attunement and an ethic of care, helping to reshape our collective spatial imaginaries.

In **"Exponential Space as a Fifth Urban Figure"**, Roberto Podda advances a broad reflective theoretical inquiry into the evolving relationship between corporeality, architecture, and urban space in the context of technological transformation. Drawing upon Wittgenstein's ontology of reality, Kantian spatial categories reframed by Husserlian phenomenology, and the contemporary discourse of embodied cognition, the article situates the body as the primary mediator of spatial intentionality.

The author offers a single-minded synthesis of classical architectural theory, from Geoffrey Scott's "enclosed void" and Henri Focillon's spatial masses to Bruno Zevi's interiority, juxtaposed with neuroscientific perspectives on perception and movement. Central here is a critical engagement with Françoise Choay's influential typology of urban figures: contact, scenic, circulation, and connection spaces.

Podda argues that the emergence of exponential technologies and digital-physical hybridization necessitates a paradigmatic expansion of Choay's system. He proposes the concept of "exponential space" as a fifth, qualitatively distinct urban figure characterised by a fundamental mutation in the ontological conditions of urban experience: the increasing mediation and fragmentation of spatial experience, the displacement of embodied proximity, and the rise of networked and dematerialised environments. While remaining finite and sensuous, the body is now extended and challenged by technological prostheses, requiring an updated theory of dwelling and interaction



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The focus is then on diagnosing of "decanonization" and "dis-belonging," where the loss of traditional contact spaces gives way to fragmented, often commodified, urban realities. In this light, exponential space emerges as both a symptom and a theoretical response to the acceleration of technological change, calling for a rethinking of architecture's role in mediating and producing meaningful urban environments.

## THE OPERATIONAL BODY-SPACE RELATIONSHIP EXPERIMENTAL ENVIRONMENT (III)

Building on the relationship between artificial light, spatiality and corporeality, **"Products, atmospheres and interactions. Relationship between the physical and phenomenological bodies and Light Art"** by María Redondo Pérez, proposes a reflection on the relationship between the virtual world and physiological space.

Drawing on Merleau-Ponty's assertion that reality is what we perceive, the author believes that Light-Art works are paradigmatic in this regard, as they are not merely to be observed but actively engage the viewer, whose body and perception become an integral component of the work itself.

Such installations function as

perceptual experiments, altering bodily behaviour through a separation between the physical body and the phenomenological body; in doing so, they effectively "prescribe" specific behaviour. The audience's experience is thus choreographed, moving beyond cognitive interpretation to active embodied experience.

To investigate the dynamics between light, space and body, the article identifies three categories of installations: products (absent interaction, passive viewer), atmospheres (the body is immersed and co-participates in meaning), and interactions (the work exists only through the physical action of the visitor). This categorisation serves to reflect on how these different types interact with the viewer's body

immersed in phenomenological space.

**"Beyond confinement. Bodies, Spaces and the Challenge of Social Reintegration"** offers an insightful reinterpretation of prisons, where bodies, placed in deprived and suspended, relationships with their environment, generate the conditions for exploring extreme contexts for design as a dialogic, situated, and gradual practice.

The article presents an urgent and conceptually rich reflection on the socio-spatial implications of incarceration, particularly in contexts like Italy where outdated infrastructural models endure and examines how design can mediate between control and rehabilitation. Through the Laboratorio Carcere's decade-long work at Politecnico di Milano, **Gianfranco Orsenigo** describes a series of "transition prototypes" - experimental, participatory devices capable of incrementally transforming detention spaces into places fostering dignity, relationships, and social reintegration.

Through the experimental San Vittore Off-Campus initiative at Politecnico di Milano, the author addresses anonymity in prison spaces, shaped by neglect, emergency-driven maintenance, and outdated punitive models. A new space within the prison is conceived as a distinctive time/place, reimagining detention as living time through interventions attuned to bodily presence, movement, and affect

The proposed methodological stance of the research suggests that even within total institutions, space can be gradually reclaimed as a site of negotiation, creativity, and relational care. By focusing on the relationship between bodies and spaces, the research rejects both abstract, top-down planning and purely functionalist maintenance, advocating instead for incremental, embodied, and context-sensitive practices.

**"Essenburg Park Between Physical Experience and Digital Representation"** offers an on-site

reflection intersecting contemporary debates on body-space relations and the role of technology in generating new narratives and practices for transforming urban and natural environments. **Sara Anna Sapone** presents Essenburg Park as a case study within the broader research framework, investigating how physical spaces, citizen-led actions, and digital tools can together shape new urban ecologies.

The essay reconstructs the site's layered history - from polder to railway yard, to informal occupation by residents (notably the Turkish Dutch community), and finally to a public park in 2018, enabled by civic activism and the recognition of its ecological and hydrological value. The park's design adopted a principle of minimal intervention, preserving spontaneous biodiversity and combining formal and informal paths to enhance diverse spatial experiences.

The park became a field to test digital tools - including Lidar mapping, terrestrial 3D scans, and participatory biodiversity databases - exploring their potential to inform more dynamic, situated design processes.

Through experiments combining digital data and embodied site experience, the study advocates for iterative, community-driven, data-informed approaches to urban nature design and care, capable of registering ecological processes and socio-cultural meanings over time.

**"Paxton after Paxton - Form as Formlessness from Dance to Architecture"** by **Antônio Frederico Lasalvia**, proposes an interesting and bold parallel between architecture and dance through a critical analysis of Joseph Paxton's Work and Steve Paxton's 'Contact Improvisation'. The terms of the comparison call into question the concept of open and recursive formal structure in relation to informality and flexibility of use. The reflection is conducted by implying a generative and non-prescriptive idea of form, within which architecture and dance become fields of possibilities rather than

pre-constituted conformations.

In architecture, the examples cited - Lacaton & Vassal, Georges Descombes, and Carla Juaçaba - aim to support an idea of design as a renunciation of closed form in favor of adaptive systems capable of accommodating the unexpected; this at the different scales and temporalities implied by such works (permanent and temporary architecture, landscape design).

The contribution opens toward a research perspective on architectural 'form as formlessness', capable of absorbing the modifications implied by changing social needs: a feedback-based approach that implies a non-fixed form that is and can adapt to evolving needs, where the formal is understood in perpetual metamorphosis.

## EMERGING REFLECTIONS

Through this collective research, some reflection emerges.

Starting from architecture per se, we see the possibility of reaffirming the capacity of architectural elements to act as spatial correlations of autobiographical memory and active agents, which involve the body, in structuring personal and collective memory, mediating transitions and emotions. This perspective extends from the phenomenological tradition (Casey, 2000; Pallasmaa, 1996) towards the need for design practices that acknowledge memory-encoded spaces, for any transformation and especially in contexts of displacement and vulnerability.

Design strategies should embrace tactile scales, material consistency, and perceptual ambiguity, also to counteract the sensory impoverishment of commodified spaces, offering empathetic and neurodiverse environments capable of eliciting multisensory engagement.

In parallel, contemporary urban contexts, especially residual and marginal spaces, continue to reveal

their potential as vital settings for informal, experimental, and bodily practices. Such spaces enable spontaneous, collective forms of placemaking and spatial agency (de Solà-Morales, 1995; Lydon & Garcia, 2015). Here, corporeality emerges as a vital medium for spatial interaction and knowledge production. Experimental, situated design practices rooted in relational and embodied perspectives - from action-research and participatory, performative urban actions to immersive, sensory explorations - reaffirm the centrality of the body in shaping the meaning and experience of space.

This resurgence of embodied practices unfolds in parallel with an era of intense technological mediation, where hybrid tools, digital platforms, and immersive environments it is hoped to multiply modes of presence and interaction, rather than simply displacing them.

On the other hand, the intensification of digital mediation within urban and architectural environments is a risk for diminishing the multisensory, affective nature of bodily experience in space. Phenomenological critiques highlighted how over-reliance on visuality, and standardised spatial production tends to flatten the spatial experiences where bodies are repositioned as spectators rather than agents.

These reflections suggest a potential disciplinary shift towards more-than-human and post-anthropocentric frameworks, where bodies, human, animal, and machinic, are understood as interdependent agents (Amin, Thrift, 2000) within complex, layered urban ecologies (Haraway, 1991).

## RESEARCH TRAJECTORIES

While some contributions critically interrogate the risks posed by digital transformations, including the fragmentation and disembodiment of experience, others foreground the mnemonic, affective, and subjective dimensions of spatiality

(Gallagher, 2005), highlighting the persistence of lived memory as an active, generative force (Merleau-Ponty, 1945/1962).

What unites them is the insistence that bodily presence, whether in public space, virtual environments, or autobiographical memory, remains central to understanding how spatial meaning, memory, and social relations are continuously produced and re-negotiated (de Certeau, 1984).

In the end, we can argue how emerging debates on body and space can open fertile ground for new, interdisciplinary research trajectories connecting architecture, urbanism, performance, ecology, and digital culture.

Promising paths lie in the combination of spatial design with neuroscience to explore how built environments affect emotions and social behaviours, especially for marginalised groups and how, conversely, bodily perceptions and sensations underlie the conception of architectural space. Parallel to this, an idea of multispecies urbanism presents shared ecologies where human and non-human bodies co-produce urban life (Braidotti, 2013).

Another relevant trajectory is related to art, where performance is seen as civic spatial agency, where public actions might be seen as capable of shaping urban space and governance. Lastly, there should also be an important effort in considering didactic practices through informed embodied pedagogies, advocating for experiential, somatic, and situated practices in urban design education.

Together, these trajectories call for a radical interdisciplinarity, amplifying spatial research from aesthetic experience to embodied, affective, and political agency, aiming for more inclusive, just, and ecologically attuned urban futures, yet consistently grounded in the human, in an understanding and respect for its corporeality and its multifaceted capacities to perceive and experience space.

## NOTES

While the three authors jointly conceived and edit the text, Marco Bovati authored "Grounding the Body-Space relationship to contemporary international debate" and "The theoretical Body-Space relationship Framework (II)", Anna Moro "The operational Body-Space relationship experimental environment (III)" and "Emerging reflections", Daniele Villa "The foundational Body-Space relationship Lens (I)" and "Research trajectories".

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