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KINAESTHESIA OF TRANSCENDENCE: A SOMATOGRAPHIC AND HAPTIC DECONSTRUCTION OF THE PATH TOWARDS THE SACRED, USING THE OLD CITY OF JERUSALEM AS AN EXAMPLE

KINESTEZJA TRANSCENDENCJI: SOMATOGRAFICZNA I HAPTYCZNA DEKONSTRUKACJA DROGI KU SACRUM NA PRZYKŁADZIE JEROZOLIMSKIEGO STAREGO MIASTA

Abstract

This article attempts to deconstruct the experience of Jerusalem's Old City by challenging the ocularcentrism that has long dominated urban theory and design. The author traces the user's somatic journey – from the city gates, through the dense network of bazaars, to the open expanse of the Temple Mount. The analysis focuses on the ways in which haptics and somatography shape the urban path toward the sacred. The central thesis argues that Jerusalem's identity is constructed through a synaesthetic experience: the distinctive osmosphere of its streets, the acoustics of its labyrinthine passages, and the palpable thermal weight of its stone. More than vision, these sensory dimensions generate a sense of transcendence. The conclusions drawn from this "Jerusalem lesson" serve as a call to reintegrate non-visual senses into design theory, promoting an architecture that responds to the full range of human perceptual capacities.

Keywords: *haptic perception, multisensory urbanism, somatography*

Streszczenie

Tekst podejmuje próbę dekonstrukcji doświadczenia Starego Miasta w Jerozolimie, odrzucając dominujący w urbanistyce okulocentryzm. Autor śledzi somatyczną drogę użytkownika – od bram miejskich, przez gęstą strukturę bazarów, aż po otwartą przestrzeń Wzgórza Świątynnego. Analiza skupia się na tym, jak haptyka i somatografia definiują miejską drogę ku sacrum. Postawiona teza zakłada, że tożsamość Jerozolimy buduje synestezja: specyficzna osmosfera traktów, akustyka labiryntu oraz odczuwalny ciężar termiczny kamienia. To one silniej niż wzrok budują poczucie transcendencji. Wnioski płynące z „jerozolimskiej lekcji" służą jako postulat przywrócenia zmysłów pozawzrokowych do teorii projektowania, promując architekturę odpowiadającą w pełni predyspozycjom człowieka.

Słowa kluczowe: *haptyczność, multisensoryczna urbanistyka, somatografia*

1. INTRODUCTION

THE PARADIGM OF CORPOREALITY IN URBAN AND ARCHITECTURAL THEORY

11 December 2009, Jerusalem

This city leaves an extraordinary impression: every stone, every sound, every smell. The view of Jerusalem from the Mount of Olives has an unforgettable magic. It is fascinating, intriguing, and intensely sensory. For the first time, I find myself in a city so profoundly shaped by its surrounding landscape, and yet so powerfully shaping it in return. It seems as if it had grown out of this land…

From the author's journal

1.1. FROM OCULARCENTRISM TO SOMATIC PERCEPTION

The author's first stay in Jerusalem in 2009 prompted reflection on the non-visual experience of the city. Seventeen years later, I recognise that, within design disciplines such as architecture and urban planning, vision continues to occupy a privileged position within the modern Western model of perception. This reflects an ocularcentric paradigm, also described as retinal dominance, which reduces the experience of space to visual representation and marginalises the other senses as instruments of cognition. This problem has been addressed, among others, by Juhani Pallasmaa, Gernot Böhme, and other theorists of architectural perception. Particularly significant in this context is Pallasmaa's observation that contemporary architectural culture has subordinated spatial experience to the logic of the image – that is, to ocularcentrism – thereby reducing the multisensory dimension of architecture to visual perception[1], although the full experience of space takes place through the entire sensorium.[2] Similarly, A. Duniewicz argues that design based exclusively on visuality impoverishes architectural experience, since architecture, as a multimodal art, operates through all human sensory channels.[3] A different but related perspective is offered by G. Böhme's concept of atmospheres, which seeks to move beyond visual reductionism. Böhme defines atmospheres as quasi-objective affective qualities: they cannot be understood merely as subjective feelings, nor as fully objective material properties, but exist instead as a relation between space and the subject who experiences it. They are emanations of space that act directly upon the body of the recipient. Atmosphere exists between subject and space, constituting a form of corporeal co-presence with place.[4] Understood in this way, architectural experience undergoes a fundamental shift: it is no longer conceived primarily as a process of looking, but as a somatic

[1] K. Banasik-Petri, *Architektura zmysłowa – nowe tendencje w procesie projektowania na podstawie wybranych przykładów z twórczości Kenya Hary*, "Kwartalnik Naukowy Uczelni Vistula" 2016, no. 4(50), pp. 19–20.

[2] J. Pallasmaa, *Oczy skóry. Architektura i zmysły*, Instytut Architektury, Kraków 2012, pp. 14–18.

[3] A. Kłopotowska (Duniewicz), *Architektura a dźwięk – interdyscyplinarne badania naukowe na temat wykorzystania sygnałów fonicznych w percepcji i projektowaniu przestrzeni architektonicznej*, "Budownictwo i Architektura" 2019, no. 18(2), pp. 111–112, https://ph.pollub.pl/index.php/bia/article/view/566/737 (access: 14.07.2026).

[4] *Ibidem*, pp. 122–123.

co-presence with space.[5] Perception here is chiefly haptic, kinaesthetic, and corporeal[6], while vision becomes only one among several channels of cognition. In this sense, the city can be understood not as a collection of architectural objects, but as a multilayered environment of experience in which spatial configuration, materiality, microclimate, and everyday practices together shape the somatic perception of place.

1.2. JERUSALEM AS A SENSORY PALIMPSEST

13 December 2009, Jerusalem

Today I took my first walk through the Old City of Jerusalem. I entered through the Jaffa Gate with a map in hand, looking first for streets, then for side alleys, threading my way through the crowd without any real chance to look around. I was assailed by the clamour of voices, the calls of vendors, the smells of stalls and bodies, until at last I emerged through the Damascus Gate. Where were the great temples, the streets? There was only congestion, bodies brushing past one another, the scent of perfume and other people's sweat, the aroma of spices forcing its way into my nostrils, the smell of cheap knitwear... the cries of vendors, an all-encompassing din... the uncomfortable, uneven paving stones and slabs that I could not even see. When I came out through the Damascus Gate, I looked at the map and realised it was useless.
This was my first encounter with the Old City.

From the author's journal



Ill. 1. Panoramic view of the Old City of Jerusalem from the Mount of Olives, a typical postcard image of the city. Photograph from the author's collection, Jerusalem 2009

[5] A. Kłopotowska (Duniewicz), *Niewidzialna architektura – status piękna w pozawzrokowej percepcji przestrzeni architektonicznej*, "Czasopismo Techniczne. Architektura" 2007, no. 104(13, 6-A), pp. 269–270.

[6] K. Słuchocka, *Zmysły w architekturze*, "Przestrzeń i Forma" 2020, no. 44, pp. 173–174, https://pif.zut.edu.pl/images/pdf/pif%2044/DOI%2010_21005_pif_2020_44_B-10_S%C5%82uchocka.pdf (access: 14.07.2026).

The Old City of Jerusalem may be admired in panoramic views both from the Mount of Olives (Ill. 1) and from the west, from Bloomfield Garden. Its spatial structure, however, reveals itself only gradually, through bodily immersion in space.[7] Narrow passages, abrupt breaks in perspective (Ills. 2 and 3), the shifting acoustics of covered routes, the osmosphere of the souks, and the haptic qualities of stone together create a multilayered perceptual environment in which individual stimuli do not operate in isolation, but are superimposed like successive inscriptions in a palimpsest. This kind of urban space corresponds to G. Böhme's concept of atmospheres: the historic fabric of Jerusalem is perceived not as a collection of architectural objects, but as a field of affective forces in which light, smell, and the tactile character of place contribute to the construction of its identity. Atmosphere belongs neither solely to the place nor solely to the observer; it is a reality that emerges between what is perceived and the perceiving subject.[8]

An essential element of this palimpsest is the audiosphere, which co-shapes the experience of place.[9] In Jerusalem's souks, sound functions as a full-fledged medium of spatial orientation: echoes reverberating from stone walls, vendors' voices, the sounds of movement, and shifts in the intensity of noise make it possible to recognise the structure of space even before it is grasped visually.





Ill. 2. Entrance to the Mosque of Omar. Photograph from the author's collection, Jerusalem 2009

Ill. 3. View from Via Dolorosa, with the tower of the Church of the Monastery of Saint Saviour in Jerusalem visible in the background. Photograph from the author's collection, Jerusalem 2009

[7] E. Konończuk, *Przestrzeń „uzmysłowiona". Psychogeografia miasta w Japońskim wachlarzu Joanny Bator*, "Białostockie Studia Literaturoznawcze" 2014, no. 5, p. 48, https://czasopisma.filologia.uwb.edu.pl/index.php/bsl/article/view/311 (access: 29.06.2026).

[8] G. Böhme, *Atmosphere as the Fundamental Concept of a New Aesthetics*, "Thesis Eleven" 1993, no. 36(1), p. 122.

[9] A. Kłopotowska (Duniewicz), *Architektura a dźwięk…*, *op. cit.*, p. 111.

The route leading from the city gates, through the network of souks, towards the open expanse of the Temple Mount may be understood as a kinaesthetic sequence shaped by Böhme's concept of atmospheres. The sensory intensity of the urban fabric abruptly gives way to an experience of light and openness. In this context, the relationship between light, landscape, and the experience of the sacred becomes particularly significant. Sacred places are not merely seen; above all, they are experienced, and their genius loci is perceived through light, materiality, and the physical presence of the user in space.[10]

Jerusalem's identity is shaped by synaesthesia: the distinctive osmosphere of its routes, the acoustics of the labyrinth, and the tangible thermal weight of stone. These elements, more powerfully than vision, create a sense of transcendence.

2. DECONSTRUCTING SOMATIC PERCEPTION

The distinctive irregularity of the urban morphology of Jerusalem's Old City shifts the perception of space from the visual towards the somatic, activating both kinaesthesia and proprioception.[11] The narrow, winding souk passages, with their constantly changing widths, together with the need to move through dense crowds, alter the rhythm of walking: the stride shortens, movement becomes more cautious, and balance is continually readjusted in response to changing route widths, ground gradients, and spatial constrictions. The somatic experience of space thus forms part of a broader somatographic mechanism through which turns, pauses, accelerations, and decelerations are inscribed in the body. This process corresponds to the approach proposed by W. Niebrzydowski and A. Duniewicz, who emphasise not only the importance of perceiving architectural space through physical touch, but also the role of the body's kinaesthetic system as a form of indirect hapticity.[12]

The surrounding crowd and the narrow, often covered passages of the souks shorten the visual perspective. This activates a mechanism in which hearing assumes a dominant role in spatial orientation. The enclosed form of these spaces encourages sound reflections, enabling the user to estimate their spatial parameters subconsciously: width, height, the presence of turns, recesses, and bifurcations, as well as the intensity of movement in other parts of the route. The phenomenon described above may be understood as kinaesthetic-acoustic spatial orientation, confirming the thesis that the perception of space is multisensory. Although it does not require physical contact, it engages the sense of touch in another way.[13] Sound plays a crucial role in G. Böhme's concept of atmospheres because it "radiates"[14]. In the Jerusalem labyrinth, acoustics not only serve an orientational function, but also participate in producing the atmosphere of the place. Sounds co-shape the user's bodily situatedness in space, influencing the way it is experienced and felt.[15]

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[10] K. Zinowiec-Cieplik, *Współczesne miejsce sacrum – relacje światła krajobrazu i architektury*, "Kwartalnik Naukowy Uczelni Vistula" 2019, no. 1(59), pp. 72–74, https://bazekon.icm.edu.pl/bazekon/element/bwmeta1.element.ekon-element-000171569661 (access: 14.07.2026).

[11] A. Kłopotowska (Duniewicz), *Niewidzialna architektura…*, *op. cit*., pp. 270–271.

[12] W. Niebrzydowski, A. Duniewicz, *Haptyczność a idee architektury brutalistycznej*, "Architectus" 2024, no. 2(78), pp. 25–26, https://architectus.pwr.edu.pl/articles/haptycznosc-a-idee-architektury-brutalistycznej/ (access: 29.06.2026).

[13] *Ibidem*, p. 25.

[14] G. Böhme, *op. cit*., p. 119.

[15] *Ibidem*, p. 122.

The smell of particular passages, specialised souks, and specific shops, such as spice shops, marked characteristic spaces and served as points of orientation. The osmosphere functions as an invisible map[16]. It signals the boundaries between different functions: the smell of the butchers' street, the smell of textiles as markers of commercial zones, the scent of holy places filled with incense, and the fresh, undisturbed air of the Temple Mount. In this context, smell becomes a topographical signal.

In the Old City, tactile memory – the traces of earlier experiences of stone, smell, moisture, and shade – intertwines with cultural and religious memory, creating a somatic-historical palimpsest of space. J. Pallasmaa observes that "the nose makes the eyes remember"[17]. Smell, the texture of stone, and the atmosphere of narrow passages activate anamnesis: a mechanism through which somatic stimuli evoke retrospective states of memory.

In the Mediterranean climate, the thermal dimension plays a further significant role in somatic perception. Jerusalem's Old City generates its own microclimate, experienced through the continual movement between sunlit areas – open passages and the few squares – and the shaded interiors of the souks. Thermal differences vary according to the season and to the number of users occupying a given space at a particular moment, especially in enclosed areas.[18] The well-known Jerusalem stone (Ill. 4), widely used as a facing material throughout the city, acts as one of its active "carriers of mood"[19]. Its ability to absorb and release heat makes space perceptible not only visually and haptically, but also thermally.



Ill. 4. Jerusalem stone in its varied material forms. Photograph from the author's collection, Jerusalem 2009

[16] K. Słuchocka, *Zmysły w architekturze..., op. cit*., pp. 173–174.
[17] J. Pallasmaa, *op. cit.*, p. 67.
[18] E.T. Hall, *Ukryty wymiar*, Muza, Warszawa 2005, p. 79.
[19] G. Böhme, *op. cit.*, p. 129.

Shifts in temperature thus become part of the somatographic inscription of space, allowing the body to recognise transitions between successive zones of the city even before they are apprehended visually.

3. CASE STUDY: FROM THE PROFANE TO THE SACRED

The Old City opened before me at the Jaffa Gate. I was leaving behind the idyllic nineteenth-century quarter of Mishkenot Sha'ananim – "Peaceful Dwellings" – with its stairways, climbing plants, empty passageways, and distinctive scents. Passing the Tower of David and entering David Street meant crossing into another world. The noise of the modern city receded: the constant honking of car horns and the murmur of engines disappeared, replaced by the resonance of the souks – a mixture of human voices and the low hum of the crowd. In that confined space, the smells of stalls, brewed coffee, textiles, and finally the porous limestone walls themselves intensified, as if the walls absorbed and preserved them. This was the first threshold I had to cross.



Ill. 5. The space of the Temple Mount. Photograph from the author's collection, Jerusalem 2009

Passing through Al Souq was the most demanding part of the route. The crowd slowed down, each step became more cautious, and moving forward meant yielding to its rhythm. The space seemed to close in through the stalls and the nearness of passers-by, breaching the limits of European personal space[20]. The sense of being absorbed into the Old City grew stronger. The smell of cardamom, za'atar, and frying oil became so dense that it seemed almost tangible on the palate. "Tasting the street" replaced looking at it. The body read the city through the roughness of stone, the uneven paving, and the successive changes in level.

[20] E.T. Hall, *op. cit.*, pp. 193–199.

Although the Temple Mount lay above, it kept descending: into narrower, darker, louder spaces, beneath an increasingly enclosing vault. By the time I reached the Western Wall, I felt that my senses had reached the point of overload.

Entering the precinct of the Dome of the Rock might have been more spectacular had I approached it from the Aqbat e Saraya souk, but I crossed the footbridge and arrived near Al-Aqsa Mosque. To enter the sacred space of the Temple Mount – "God's space" – is to experience release, silence, and relief. Space seems able to wash over the body and cleanse it; in this case, it does exactly that. The noise disappears, sound rises upward, and the lack of lateral reflections produces an impression of almost unnatural calm – an acoustic sign of the sacred. After the darkness of the souks comes the sudden force of sunlight and a palpable shift in temperature within the open space.

> *The view of Jerusalem is the history of the world; it is more, it is the history of earth and of heaven.* [21]

4. CONCLUSION

The use of personal experience may raise methodological concerns. In the case examined here, however, the path towards the sacred is not merely an urban structure, but an experience constituted through the body, movement, and the senses. Within phenomenology, drawing on the thought of Merleau-Ponty, Husserl, and Bachelard, experience is regarded as one of the fundamental sources of knowledge. Similar assumptions underlie psychogeography and phenomenological approaches to architecture, developed, among others, by J. Pallasmaa, Peter Zumthor, Steven Holl, and A. Duniewicz. For this reason, the excerpts from the author's journal are treated here as field notes documenting the direct experience of place[22].

Science seeks objectification, yet the reception of architecture – and of cities in particular – is necessarily subjective. Culture, history, and social practices shape the way a city is used just as strongly as its architectural form. The city's materiality, acoustics, osmosphere, light, and microclimate co-shape the user's experience and the bodily attunement to place. As architects, we cannot restrict ourselves exclusively to an objective scientific perspective, for such an approach risks obscuring the very essence of architecture as an art of shaping space.

The documentation of the path of transcendence presented in this essay is not only a case study of Jerusalem's Old City, but also part of a broader critique of ocularcentrism and of the search for authenticity in architecture and urban planning. In closing, I would like to draw attention to contemporary architecture, which is often the product of modelling and frequently operates through the effect of visual surprise: the effect of a single moment, stripped of perception through the other senses. What is missing here is the construction of a "path", the building of tension, and an engagement with senses other than

[21] B. Disraeli, *Tancred* [foreword], [in:] S.S. Montefiore, *Jerozolima, Biografia* [EPUB] Wydawnictwo Magnum, Warszawa 2014.

[22] K. Słuchocka, *Percepcja architektury w kontekście poszerzonego zakresu czynników poznawczych. Wybrane zagadnienia*, "Architectus" 2022, no 2(70), pp. 111–112, https://architectus.pwr.edu.pl/articles/percepcja-architektury-w-kontekscie-poszerzonego-zakresu-czynnikow-poznawczych-wybrane-zagadnienia/ (access: 29.06.2026).

sight. This critique does not apply to all architects; among those who adopt a sensuous approach, one may point to the works of figures such as A. Aalto, Steven Holl, Jørn Utzon, architects associated with Brutalism[23], Tadao Ando, Peter Zumthor, Álvaro Siza, Kengo Kuma, Balkrishna Doshi, and Wang Shu. [24] Architecture is not an object to be looked at, but a space for "being as a body"[25], and Jerusalem offers one of the clearest examples of this ontological truth.

> *The timeless task of architecture is to create embodied and lived existential metaphors that concretise and structure our being in the world.*[26]

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[23] W. Niebrzydowski, A. Duniewicz, *op. cit.*, pp. 23–24.

[24] K. Banasik-Petri, *op. cit.*, pp. 20–21.

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