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THE SENSUALLY TANGIBLE SACRED. A MULTISENSORY EXPERIENCE OF LITURGICAL AND ARCHITECTURAL SPACE

SACRUM ZMYSŁOWO UCHWYTNE. WIELOZMYSŁOWE DOŚWIADCZENIE PRZESTRZENI LITURGICZNEJ I ARCHITEKTONICZNEJ

Abstract

This article addresses the significance and role of the senses in the perception of liturgical space and the liturgy itself. At the same time, it emphasises their connection to Christian symbolism. The five basic senses (sight, hearing, smell, taste, and touch) are analysed, demonstrating how they determine experience of sacred spaces. The article draws on the work of theorists, theologians and architects addressing the importance of the senses in the perception of these spaces. Drawing on documents, literature, and examples, the author analyses their significance for the perception of buildings. The research findings confirm the crucial importance of the senses in the experiencing architecture and liturgy.

Keywords: *liturgy, perception, sacred architecture, senses*

Streszczenie

Artykuł podejmuje problematykę znaczenia i roli zmysłów w percepcji przestrzeni liturgicznej oraz samej liturgii. Jednocześnie podkreśla ich związek z symboliką chrześcijańską. Poddano analizie pięć podstawowych zmysłów (wzrok, słuch, węch, smak, dotyk), wskazując, w jaki sposób determinują one doświadczanie przestrzeni sakralnych. W artykule przytoczone zostały tezy i badania teoretyków, teologów oraz architektów poruszających temat znaczenia zmysłów w odbiorze wspomnianych przestrzeni. W oparciu o dokumenty, literaturę oraz przykłady autor analizuje ich znaczenie dla odbioru budowli. Uzyskane wyniki badań potwierdzają kluczowe znaczenie zmysłów w doświadczaniu architektury i liturgii.

Słowa kluczowe: *architektura sakralna, liturgia, percepcja, zmysły*

1. INTRODUCTION. ARCHITECTURE – LITURGY – THE SENSES

Architecture and liturgy engage the human being in a holistic and multidimensional manner. The significance of the sensory perception of architecture has long been recognised and addressed in scholarly discourse. However, with regard to practices and the broadly understood realm of the *sacred,* this dimension still seems insufficiently present in the public consciousness. Meanwhile, liturgy affects people not only in the spiritual and intellectual

spheres. It engages the body and thus all its basic senses – sight, hearing (e.g. responding to the sound of bells and the singing of psalms), smell (e.g. reacting to the scent of incense, wax candles, rose oil from the Stone of Anointing[1]), taste (of the host and wine), and touch (e.g. responding to the contact of the hand with holy water in a stoup and to the laying on of hands during the sacraments) – in active participation. This is obviously linked to the nature of human experience, but it also stems from the Christian tradition and its sources.

Many experiences may become imprinted in the sensory memory of those who encounter sacred spaces. The experience of architecture extends far beyond its perception through sight alone. Steen Eiler Rasmussen rightly observes: "it is not enough to see architecture; you must experience it"[2]. Like liturgy, architecture has its own realm in which it exists. Peter Zumthor adds that architecture "has a special physical relationship with life"[3]. It is therefore impossible to design a properly functioning sacred space without taking into account the influence that carefully chosen colours, building materials, lighting, acoustics, the expression of stained-glass windows, the temperature of the interior, the air exchange rate, etc., have on the human psyche and perception. A noteworthy analysis of some of these issues and the significance of the senses in the perception of sacred spaces is provided by Mieczysław Twarowski in his study titled *Metody projektowania kościoła*[4] [Method of Church Design].

2. BETWEEN BEGINNING AND FULFILMENT: BIBLICAL ARCHITECTURE OF THE SACRED IN THE LIGHT OF THE SENSES

In the documents of the Roman Catholic Church, there is little reflection on the role of the senses in the perception of art and liturgy. There are only fragmentary references to them as supplements to other issues. This is all the more significant given that, from a biblical perspective, both the oldest detailed description of a building[5] associated with worship in the Holy Scripture – i.e. the Tent of Meeting[6] – and the last one, referring to the eschatological (and also architectural) vision of the city of New Jerusalem[7], indirectly address the subject of the sensory experience of sacred space and worship services.

[1] The Stone of Anointing is, according to tradition, the slab on which Jesus' body was prepared (anointed) for burial.

[2] S.E. Rasmussen, *Odczuwanie Architektury* [*Experiencing Architecture*], trans. B. Gadomska, Karakter, Kraków 2015, p. 35.

[3] P. Zumthor, *Myślenie architekturą* [*Thinking Architecture*], trans. A. Kożuch, Karakter, Kraków 2010, p. 12.

[4] M. Twarowski, *Metoda projektowania kościoła,* Wydawnictwa Rady Prymasowskiej Budowy Kościołów Warszawy, Warszawa 1985.

[5] Earlier descriptions of structures related to worship appear in the Scriptures – the altars (Gen 8:20, 12, 13, 22). However, it is the description of the Tent of Meeting that constitutes the first such detailed architectural depiction. Its significance is all the greater because it was understood to have been revealed to Moses by God Himself.

[6] *Cf. The Book of Exodus*, chapters 25–32, 35–40 [in:] *Biblia Tysiąclecia. Pismo Święte Starego i Nowego Testamentu.* [*Millennium Bible. The Holy Scriptures of the Old and New Testament*] (5th ed.), Pallottinum, Poznań 2003.

[7] The New Jerusalem is the vision of a city descending out of heaven from God, described in the Book of Revelation. It is a place of salvation and eternal life. *Cf. Revelation*, chapters 21:9 – 22:2 [in:] *Ibidem*.

In the detailed instructions for the construction and functioning of the Tent of Meeting, one can find elements that appeal to all the basic human senses. This primarily concerns the senses of sight and touch, which are engaged by the variety of materials used in the Tent of Meeting, such as gold, silver, bronze, acacia wood, stones (ruby, topaz, emerald, garnet, sapphire, beryl, opal, agate, amethyst, chrysolite, onyx, and jasper), textiles (fine linen and fabrics woven with gold thread, as well as with blue, purple and scarlet yarn), and hides (of goat, ram, and possibly of large aquatic mammals). The tactile dimension is present in the commandment to wash hands and feet (Ex 30:17–21). The sense of smell is evoked through the use of oils (olive oil for keeping the light burning, oil for anointing heads), fragrant incense, the function of the incense altar, and the burnt offering. The sense of taste appears in the context of dietary and ritual elements, such as the showbread and lamb meat. The sense of hearing, in turn, is associated both with the sound accompanying the priest's entry into the Holy Place (Ex 28:33–35) and with the very experience of the Tent itself as a space for "hearing" the voice of God.

In the description of the architecture and urban planning of the New Jerusalem, chiefly the following senses can be distinguished: sight (visual descriptions of the wall, twelve gates, foundations, and the precise dimensions of the city on the mountain), touch (interaction with the materials used, such as pure gold, pearls, and stones: jasper, sapphire, chalcedony, sardonyx, carnelian, chrysolite, beryl, topaz, chrysoprase, hyacinth, and amethyst), hearing (the voice speaking from the throne), and, indirectly, smell (the metaphor of incense, which represents the "prayers of the saints" – Rev 5:8), and taste (the description of the "water of life" and the "tree of life" bearing twelve fruits – Rev 22:2). From the perspective of the Christian faith, this constitutes an attempt to describe a transformed reality which man will experience through a transformed body. For this reason, it is impossible to unequivocally determine the precise senses through which this "space" will be perceived. The description of the New Jerusalem can be interpreted as metaphorical and symbolic, although within the framework of Christian theology, its real dimension is not ruled out.

3. CHURCH WALLS – INSTRUMENTATION OF THE EYE AND OF THE EAR

One's first conscious encounter with a sacred building usually takes place through sight or hearing. This experience most often begins with the sight of the structure of a church or with the sound of a bell ringing out from the belfry. Furthermore, sight and hearing are the only senses mentioned in the *Catechism of the Catholic Church* in the section devoted to art[8]. This is due to the fact that art affects people primarily through image and sound. Throughout the history of Western culture, sight has been regarded as the dominant sense and the most valuable in terms of cognition. The phenomenon of ocularcentrism has been extensively described by Juhani Pallasmaa[9]. In Christian iconography, the sense of sight found

[8] "Art is a form of practical wisdom (...) to give form to the truth of reality in a language accessible to sight or hearing". See: *Katechizm Kościoła Katolickiego* [*Catechism of the Catholic Church*], Pallottinum, Poznań 1994, para. 2501.

[9] J. Pallasmaa, *Oczy skóry. Architektura i zmysły* [*The Eyes of the Skin: Architecture and the Senses*], trans. M. Choptiany, Instytut Architektury, Kraków 2012.

its particular expression in the form of the Eye of Providence – a symbol of the "seeing" Creator/Holy Trinity[10] (Ill. 1).

A key moment in the history of the Church's official teaching, confirming the importance of sight in the experience of faith, was the Second Council of Nicaea (787). Convened during the period of iconoclasm to resolve the dispute over the veneration of icons, the Council affirmed that the spiritual reality of Christ after the Incarnation could be represented through icons, mosaics, and paintings[11]. The use of the sense of sight was deemed helpful on the path of faith and cognition – to such an extent that thirteen centuries later, Joseph Ratzinger (later Pope Benedict XVI) formulated the conclusive view that a complete absence of images in the liturgical space is incompatible with faith in the Incarnation of God[12].

Architecture also affects the sense of hearing. Although it is (as a rule) silent in itself, the materials used, the geometry and proportions of the interior, and the shape of the vault determine its acoustic properties. "In the old churches the walls were in fact powerful instruments which the ancients learned to play upon"[13] – Rasmussen noted in his book *Experiencing Architecture*. The rhythm and melody of the psalms, the singing of Gregorian chants, and liturgical recitations arose in dialogue with the architecture. The silent walls of the temples absorbed and reflected sounds, thereby helping to shape their final timbre (Ill. 2).



Ill. 1. Eye of Providence on the façade of the Church of St. Anne in Kraków, Poland, photo: Jakub Turbasa

[10] The Eye of Providence depicts a human eye surrounded by rays of light or glory, inscribed within an isosceles triangle. Some researchers trace its origins to ancient Egyptian symbolism.

[11] A. Baron, H. Pietras (eds.), *Dokumenty Soborów Powszechnych (325–757*) [*Documents of the Ecumenical Councils (325–787)*], vol. 1, Wydawnictwo WAM, Kraków 2001, paras. 14–16.

[12] Joseph Ratzinger extensively discusses the place of images in liturgical space in the chapter *The Problem of Images*. See J. Ratzinger, *Duch liturgii* [*The Spirit of the Liturgy*], trans. E. Pieciul, Klub Książki Katolickiej, Poznań 2002, pp. 105–122.

[13] S.E. Rasmussen, *op. cit.*, p. 257.



Ill. 2. Interior of St. Benedict's Church at the Sint Benedictusberg Monastery in Mamelis (Vaals), the Netherlands, project: Hans van der Laan, photo: Jakub Turbasa

4. THE SENSE OF TOUCH. MATTER – BODY – INCARNATION

A person's first physical contact with a building (usually) begins when they touch the door handle with the palm of their hand. It is a handshake with the building, which can be "inviting and courteous, or forbidding and aggressive" – as Pallasmaa puts it[14] (Ill. 3). The sense of touch reacts to shape, material, texture, surface temperature, and so on. The body and the sense of touch occupy a special place in Christian theology. At the foundation of the entire Christian doctrine lies the mystery of the Incarnation, which gives the body, and consequently the senses, exceptional significance. Ratzinger notes that not only the human body and cosmic symbolism play an essential role in the liturgy, but that "the matter of this world is part of [it]"[15]. Christian eschatology also points to the special role of the body. It posits that it is the human body, not the soul, that will be resurrected[16].

Pallasmaa notes that a person senses the atmosphere of a place even before any conscious observation takes place[17]. According to Zumthor, the buildings he designs are "bodies and need to be built accordingly: as anatomy and skin (…)"[18] (Ill. 4). Contemporary research

[14] J. Pallasmaa, *Oczy skóry..., op. cit.*, p. 72.

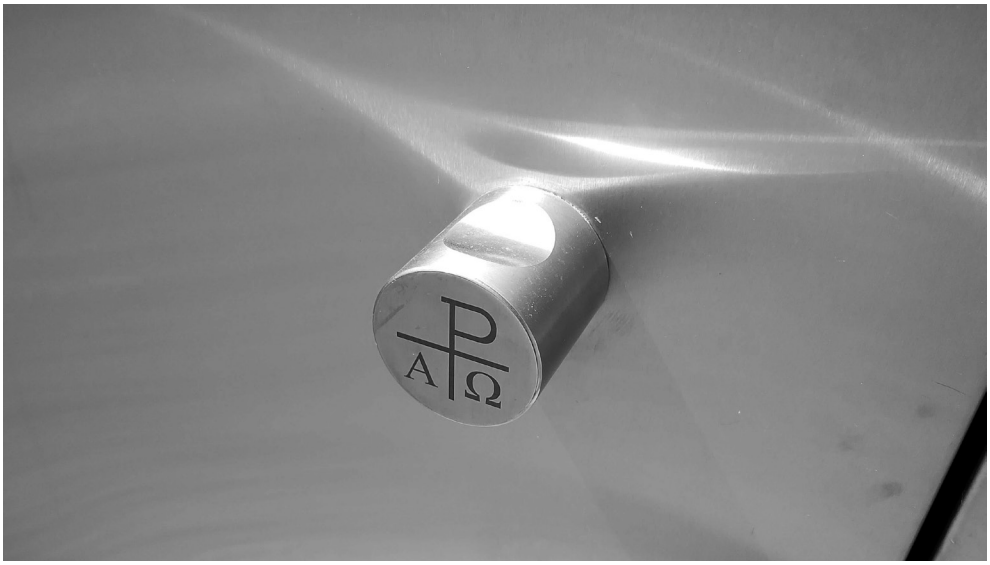
[15] See: J. Ratzinger, *op. cit.*, pp. 194–196.

[16] *Katechizm Kościoła Katolickiego*, *op. cit.*, paras. 988–1019 and *Apostles' Creed*.

[17] J. Pallasmaa, *Dotykanie świata. Wstęp do trzeciego wydania* [*Touching the World. Preface to the Third Edition*], [in:] *Ibidem*, p. 19.

[18] P. Zumthor, *Magia rzeczy realnych* [*The Magic of the Real*], [in:] A. Budak (ed.), *Co to jest architektura?: What is architecture?*, trans. M.A. Urbańska, Manggha, Kraków 2008, p. 581.

reveals a broad spectrum of hapticity. Analyses by phenomenologists also indicate that the other human senses can be understood as extensions of the sense of touch. Pallasmaa emphasises that "the senses are specialisations of skin tissue, and all sensory experiences are modes of touching, and thus related to tactility"[19]. Even the transparent cornea of the eye is covered with a layer of modified skin[20], and through the sense of touch, a person is able to recognise several types of colours via the skin[21].



Ill. 3. Door handle of the Chapel of the Last Farewell in Rychwałd, Poland, project: Bartłomiej Pyrzyk & Jakub Turbasa, photo: Jakub Turbasa

Theologian Guardini asserts that "next to the face, the part of the body fullest of mind is the hand"[22], and he also describes it as a "skilful workmanlike contrivance for the soul to make herself known by"[23]. Religious gestures performed with the hands include, among others, making the sign of the cross on the body, gestures during the Eucharist, and the laying on of hands on the head of the candidate during Confirmation or during priestly ordination. Thus a spiritual dimension is attributed to bodily gestures. In *The Spirit of the Liturgy*, Joseph Ratzinger devotes a separate chapter, *The Body and the Liturgy*, to bodily gestures and postures, as well as liturgical vestments, examining their meaning and symbolism[24].

[19] J. Pallasmaa *Myśląca dłoń: Egzystencjalna i ucieleśniona mądrość w architekturze* [*The Thinking Hand: Existential and Embodied Wisdom in Architecture*], trans. M. Choptiany, Instytut Architektury, Kraków 2015, pp. 110–112.

[20] A. Montagu, *Touching: The Human Significance of the Skin*, Harper & Row, New York 1971, p. 3, cited in: *Ibidem*.

[21] J. Turrell, *Plato's Cave and Light Within*, [in:] M. Heikkinen (ed.), *Elephant and Butterfly: Permanence and Change in Architecture*, 9th Alvar Aalto Symposium, Jyväskylä 2023, p. 144, cited in: J. Pallasmaa, *Oczy skóry…*, *op, cit.*, p. 15.

[22] R. Guardini, *Znaki święte* [*Sacred Signs*], trans. J. Birkenmajer, Paulinianum, Częstochowa 2022, p. 18.

[23] *Ibidem*, p. 111.

[24] J. Ratzinger, *op. cit.*, pp. 153–198.



Ill. 4. Chapel of St. Benedict in Sogn Benedetg, Switzerland, project: Peter Zumthor Atelier, photo: Jakub Turbasa

5. THE SENSES OF TASTE AND SMELL

Taste and smell are the senses that receive the least attention in discourse on architecture and liturgy. Pallasmaa, however, puts forward the bold thesis that "the most archaic origin of architectural space lies in the cavity of the mouth"[25]. He justifies this by pointing out that there are a number of subtle connections between the tactile, visual, olfactory, and gustatory senses[26]. The relationship between the visual perception of colours and the sense of taste is also described by Twarowski[27].

The central act of worship for Christians is the Eucharist. In the early days of Christianity, it was referred to as "the breaking of bread" (Acts 2:42). The bread and wine consumed during the Eucharist obviously affect the senses of taste and smell. In Latin theology, it is recognised that through transubstantiation, following consecration, the substance is transformed into the Body and Blood of Jesus Christ, while retaining the taste, smell, appearance, and all the sensory properties of bread and wine[28].

The scent of architecture shapes the identity of a place. It often evokes memories of the past, a phenomenon known as the "memory of place"[29]. During the liturgical celebration, the

[25] J. Pallasmaa, *Oczy skóry*..., *op. cit.*, p. 71.

[26] "A delicately coloured polished stone surface is subliminally sensed by the tongue," notes Pallasmaa. *Cf. Ibidem*.

[27] It describes, among other things, that warm colours have a positive effect on appetite and that colour perception may be related to taste sensations. *Cf.* M. Twarowski, *op. cit.*, pp. 230–242.

[28] The theological-dogmatic truth was proclaimed as dogma during the Fourth Lateran Council in 1215.

[29] A smell can cause a person to unconsciously enter a space completely forgotten by the retina of the eye (retinal memory). *Cf.* J. Pallasmaa, *Oczy skóry*..., *op. cit.*, p. 67.

presence of smouldering incense (a mixture of natural plant resins and fragrant substances), candle wax and the oil lamp is most distinctly perceptible (Ill. 5). The fleeting nature of the smoke and scent rising from the thurible symbolises the transcendence of God, the purification and sanctification of the space, and prayer rising like smoke towards Heaven. The aforementioned description of the Tent of Meeting and the associated liturgical practices also mention holy oils and incense, the fragrance of which is intended solely for God (Ex 30:22–38).



Ill. 5. Chapel of the Monastery of the Community of the Little Sisters of the Lamb at the *Orientale Lumen* Little Monastery, Choroń, Poland, photo: Jakub Turbasa

6. THE SIXTH (SPIRITUAL) SENSE AND MANIPULATIONS OF THE SENSES

In addition to the basic senses mentioned above, the Church distinguishes yet another – the *sensus fidei* (sense of faith). It relates to an entirely different order of cognition. The sense of faith is neither a form of sensory perception nor a biological sense. Whilst the bodily senses relate to empirical reality, the sense of faith relates to spiritual reality[30]. Theology understands it as the faithful's spiritual intuition, enabling recognition of the truths of faith. Within the community, the faithful are assumed to be able to instinctively distinguish falsehood from truth without specialist knowledge or theological training.

[30] See: *Katechizm Kościoła Katolickiego*, *op. cit.*, paras. 250, 785, 889.

Issues concerning the truth (authenticity) of works of art are raised in the *General Instruction of the Roman Missal*. The document unambiguously emphasises that in sacred spaces and art, "in the choice of elements attention should be paid to authenticity"[31]. This constitutes an expression of disapproval of imitation, which is associated with the concepts of falsehood and mystification. These lead to the blurring and distortion of the essence of an object, material or work of art, reducing its significance to a purely superficial layer. Natural and noble materials affect the human senses differently from artificially processed ones. Contact with them opens the way to deeper understanding, authentic experience and an appreciation of the complexity of a given work or space[32]. This phenomenon of imitation has crept into many sacred interiors in the form of substitute solutions, such as artificial candles (plastic tubes filled with oil) instead of wax ones, printed icons instead of painted ones, electric "olive" lamps, polyester liturgical vestments, computer-printed designs in synthetic threads instead of hand-embroidered ones, and the use of white wine (for practical reasons, described as a "less messy purificator") instead of red wine, understood as a sacramental sign of blood. For a sensitive observer, the use of these "manipulations" in the space of worship, which touches upon the fundamental dimensions of a believer's life, arouses disgust and justified opposition. Describing similar phenomena in other spheres of life, Rasmussen diplomatically noted that "there is something unsatisfactory about such camouflage. It is irritating to discover that the thing is not what we expected"[33].

7. SUMMARY. A REALITY BEYOND THE SENSES

The teaching of the Roman Catholic Church emphasises that a man is, by nature, both a corporeal and a spiritual being[34]. This clearly shapes the experience of architectural spaces – including sacred ones – as well as the liturgy itself. Consequently, the Church justifies the need for buildings, signs, symbols, images, etc., which are intended to contribute to spiritual development. The quality of these spaces matters. They can foster a person's inner integration (Ill. 6) or lead to dispersion and a loss of concentration.

As demonstrated above, the role of the body in experiencing liturgy and architecture is fundamental, and consequently both spheres are experienced through all the senses. The ultimate goal of both architecture and religious life extends beyond the building itself and religious practices. *The Catechism of the Catholic Church*, following Pius XII, emphasises that "truths that concern the relations between God and man wholly transcend the visible order of things"[35]. It is the senses that lead us to what "transcends" the senses… This is the paradox and mystery of both leading the life of faith and designing and experiencing profound architecture.

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[31] *Ogólne Wprowadzenie do Mszału Rzymskiego* [*General Instruction of the Roman Missal*], para. 292.
[32] J. Turbasa, *Ukryte piękno. Architektura współczesnych kościołów*, Biblioteka "Więzi", Warszawa 2019, pp. 123–124.
[33] S.E. Rasmussen, *op. cit.*, p. 243.
[34] *Katechizm Kościoła Katolickiego*, *op. cit.*, para. 362
[35] *Ibidem*, para. 37.



Ill. 6. Church of St. Peter in Firminy, France, project: Le Corbusier and José Oubrerie, photo: Jakub Turbasa

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