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Windows and Church Space in Early Medieval Byzantium and West

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By looking at the way the windows of cultic buildings were perceived and described in Late Antiquity and the Early Middle Ages, the article underlines fundamental differences existing between the early Byzantine and the western concept of church space. It results that while in the east the apertures came to be used to create a dramaturgy of light that gave visual support to the postulation of the church as a reflection of the heavenly temple, in the west the church space tended to close on itself. It appears thus that in the West the windows were addressed not as openings but as a special type of panel, decorative and luminous, that added to the beauty of the decoration.

Keywords: windows, church space, light, architecture, iconography

Vladimir Ivanovici Accademia di Architettura, Mendrisio e-mail: vladimir.ivanovici@usi.ch Sacred space is dynamic,¹ being enmeshed in various layers of meaning and conveying both a profane and a sacred rhetoric of power. The built structures used by the early Christians developed into symbolic patterns that both reflected and regulated human-divine relations. Byzantine theologians from the 6th century onward tended to regard architecture as a form of theology fixed in space,² perceiving the church as a structure built according to a coherent ideological program meant to bring humanity and God together by providing a place of assembly suitable for both. This fundamental dynamic, the result of five centuries of debates on the possibility to circumscribe the divine, provided the context upon which all other layers of meaning subscribed in the structure of the building were added.

Responding to a concern expressed by Francesca Dell'Acqua, the great specialist in the matter of medieval glass, the present paper wishes to look from a novel point of view at the sources that mention windows in Late Antique and Early Medieval cult buildings.3 In his book on Spiritual Seeing, Herbert Kessler argued in favour of a fundamental distinction existing between the Western medieval and Byzantine perception of church space. While for the Byzantine, says he, the icon or fresco in the church is a window opening towards a superior dimension, for the Western onlooker: 'If it was a bridge, it was a drawbridge drawn up, if a window, then only with a shade pulled down. It marked the existence of a world out there, but it also revealed its own inability to transport the faithful into that world.4 In the present article I would like to pursue Kessler's contention by looking at the way church windows were described. It will become evident, I hope, that the perception of the openings was directly dependent on the overall apprehension of the church space, providing thus the context to explore Byzantine and Western attitudes towards the latter. Addressed from this point of view the matter will reveal conceptual differences that will, hopefully, help explain some of the artistic and architectural transformations underwent by openings in the two traditions.

As fundamental as they were to a religion based on a theology of light and which developed its cultic spaces as a reflection of a larger gusto for all things luminous,⁵ win-



1 - Window and decoration of the window sill, 421-445. Mausoleum of Galla Placidia, Ravenna

dows received very little attention in the authors whose writings have survived. Furthermore, the few references that we do have are spatially and chronologically dispersed, making it hard to extrapolate. It is, somewhat surprisingly, in the West that we hear more often about windows, perhaps also due to the current state of research.⁶ In our analysis we will thus attempt to synthesize what appear to be general attitudes towards apertures in cultic buildings, in relation with the overall concept of the church space.

Before East and West

The 4th- and 5th-century Christian intelligentsia seems to have shared a surprisingly coherent education and worldview. Grouped into schools of thought, Christians of this period addressed church buildings in relation with the previous age, when monumental constructions were not accessible to the community. The apertures were appreciated from a rather functional point of view, writers underlining the vast amount of light that the windows were allowing to enter their cult buildings, an element that distinguished them both from the usually dark interiors of traditional temples and from accusations of conducting their rituals in secrecy.⁷

Nevertheless, extant decorative programs in Ravenna and Naples nuance our knowledge of the windows' relation with the rest of the building, transpiring the builders' desire to integrate them in the iconographic program. The so-called Mausoleum of Galla Placidia places the windows

in a relation with human figures and depictions of divine light that was to become customary in later Christian art. ⁸ Centripetal element in most of the scenes, the window was used to underline the luminous character of the divine light and the waters of paradise. ⁹ Associated with the latter two elements, as well as with the fire that consecrated Lawrence as a martyr, the windows in the Mausoleum and the light they let through were certainly meant to be perceived as opening towards heaven, not the outside. The impression is further emphasised by the decoration of the window sills, where an undulating pattern renders visual the intermediation that the window was enacting. [fig. 1]

In Naples, the decoration of the baptistery of San Giovanni in Fonte pertains to a period when, in all likelihood, the baptismal ritual was still nocturnal.¹⁰ How exactly the windows under the cupola were perceived and their interaction with the iconographical program is thus as uncertain as it is intriguing, the human figures being disposed towards the openings in the same manner as in the Mausoleum. It is my contention that the surface of the openings in the baptistery was not to be perceived as window surface but rather as part of the decoration, interacting in some manner (perhaps through the placing in front of them of hanging lights whose flickering would have played on the vitreous surface) with the rest of the composition. As signalled to me by Chiara Croci, of the pairs of martyrs flanking the windows, only the two occupying the place of esteem on the main axe of the building turn towards the window in a sign of reverence.



2 - Martyrs flanking window (now closed) with detail of depicted window, end of the 4th century. Baptistery of San Giovanni, Naples

The stance, found also in the Mausoleum in the same conditions, was to become customary in later iconography, scholars agreeing that the flanking characters address the window due to its association with Christ as *lux*. As attractive as it might be the explanation is, at least for Naples, unlikely due to the nocturnal character of the ritual.¹¹ The presence, in the very scenes that incorporate the windows, of portrayed apertures sustains the thesis that the real openings were not to be perceived as such.¹² [*fig. 2*]

One special type of aperture in this period is represented by the false oculi present in the decoration of canopy-like spaces. Drawing, presumably, on a common feature of Roman architecture, 13 the motif of the decorative oculus opening towards a higher dimension is recurrent in late Roman times.¹⁴ In the baptistery of San Giovanni in Naples and that of the Orthodox in Ravenna, to take only two examples, the 'apertures', open towards different horizons. In Naples it is a vision of the Chi-Rho set against the starry sky, a theophany taking place in the time but not in the space of the baptistery. On the contrary, in the Orthodox baptistery in Ravenna the baptizand was offered the sight of an ancient event, re-enacted through the ritual. 15 The baptism of Jesus in the Jordan and that of the baptizand in the font were mirroring each-other as the font reflected the scene in the cupola, testifying to the capacity of the context to transform the catechumen in a Christic figure. 16 [fig. 3]

The perception of this particular kind of 'window' was thus dependent on the context, manipulated through catecheses as well as iconographical and ritual associations. ¹⁷ Of the two compositions it was the one in Naples that represents the rule in this period. ¹⁸ Although the baptistery and the ritual it housed were the triggers of the 'vision', this type of opening did not advocate spatial proximity, the interior of the building and the scene in the cupola

being placed at the opposing ends of a chasm as great as that separating the human and the divine. ¹⁹ Drawing on a common feature of Late Antique initiatory rituals, the scene symbolized the rite's capacity to grant one access to the higher, perfect spheres of the cosmos, by opening a worm-hole cutting through the lower dimensions. ²⁰ Although collapsed in the vision, the difference between the two stood as an inherent, indeed fundamental reverse-side.

The three cases we have briefly reviewed indicate a varied use and perception of the notion of window in paleochristian cultic buildings. Between the real windows of the Mausoleum, the pseudo-windows of the baptistery in Naples, and the illusory ones in the cupolas it becomes clear that the designers of these buildings orchestrated the placing and depiction of the apertures in order to enhance the effect of the ritual. The situation was, certainly, different in Constantinian and post-Constantinian basilicas, where the multitude of the apertures helped create a hierarchy between the spaces while making legible the mosaics they intercalated.²¹ While the light amount and its interaction with the decorative materials are repeatedly addressed in the sources, the windows themselves are given little attention in this period. It was only with the development of a coherent concept of the church structure as a reflection of the heavenly temple, in the 6th century, that windows came to receive more attention, as part of a very elaborate visual rhetoric of Christian theology that used architecture, the rhetoric of materials, and iconography to build its discourse.

In the East

The presentation of cultic interiors as referential of a heavenly context was catalysed by the lavish decoration that characterized Justinianic foundations. The relation was

consciously sought by the artisans of churches such as Hagia Sophia in Constantinople, San Vitale in Ravenna, or the basilica Euphrasiana in Poreč as testified by the coherent use of elements adding up to a representation of the heavenly temple.²² It is in this vein, through the amassing of elements conventionally associated with God and heaven that the church building, drawing on the ancient notion of temple, came to be indicated as a dwelling-place of God, in contradiction with the early Christian discourse that denied the possibility to circumscribe God in man-made structures.²³ Procopius' description of Hagia Sophia best illustrates the process, the text transpiring two seemingly contradictory definitions of the church. On the one hand the building is indicated as the place where the divine is located and can be found, a space that it inhabits. The building is thus a container of the Divine Presence, as the temple in Jerusalem had been,²⁴ marking the spot where the divine could be found on earth. On the other hand the church and its constitutive elements are presented as anagogical triggers, pointing towards a higher dimension.²⁵

This mirroring of the heavenly temple bore fundamental participative connotations, inherent to the Late Antique cultural context, the decoration's capacity to flesh out its divine correspondent conveying to the scene a re-presenta-

tional, thus substantial quality. As earlier, with the paintings Paulinus had made in complex he built for St. Felix at Nola, a paradoxical phenomenon was developing. The inevitably limited space of the church was credited with containing the Divine Presence, just as the empty images (vacuis figuris) enacted in the onlookers a real presence.²⁶ The windows, as testified by Paulus Silentiarius and the coeval dedication hymn from Edessa, played a central part in the mise-enscène. The light that the apertures allowed to enter is not yet identified as divine. It is a rather functionalist view that the two authors adopt, the Silentiary describing the effects it had on the perception of various spaces and surfaces while the anonymous author of the Edessa hymn associated the light coming from the openings with images of the Trinity and Christian saints.²⁷ The former underlined the apertures' enhancement of the architecture while the latter developed an iconographic expression based on their effect.

While at a speculative level the ambivalence of the church space, as both container and referent, always remained a matter in Christian theology, Late Antique and Early Medieval testimonies indicate that the West and the East came each to prefer one of the postulations. The church interior as habitation of God in a most substantial manner survives in early Byzantine authors, Germanus of

3 - Cupola decoration, 451-468. Orthodox baptistery, Ravenna





4 - The Virgin and Baptist addressing the window in reverence, 817-824. Chapel of Zeno, Sta. Prassede, Rome

Constantinople declaring in the early 8th century that the church 'is heaven on earth, where the God of Heaven dwells and moves. ²⁸ Nevertheless, the relation with the Presence was rarely understood in such straightforward terms. ²⁹ Mirroring, as the tabernacle of Moses had, the heavenly temple, ³⁰ the church was identified as a powerful visual expression of fundamentally invisible realities. It was only during the liturgy that the two dimensions were collapsed, the ritual enacting a commingling of the human and heavenly communities. Merged in doxology the two dimensions overlapped as Christ descended on the altar to offer His body to the congregation, the difference being annulled. ³¹

This view of the ritual's capacity prevailed in the early Byzantine world, the Antiochene and the Alexandrine traditions, one Aristotelian and one Platonic, one favouring the recreation within the church of the historical dimension of the Incarnation, the other addressing it as fundamentally anagogical, both agreeing that church space and the heavenly temple overlapped. It was with Maximus the Confessor that the relation between heaven and church space was coherently organized in the East. Perorating on the twofold character of existence and on the capacity of the cultic context to transport one from one echelon to another, the Church Father argued in favour of a direct relation existing between heavenly realities and their cultic counterparts. More than direct, the representativeness of the church building is indicated as absolute as he concludes that 'Things which are significative of each other are bound to contain clear and *perfectly true expressions* of each other; and *a flawless relation* to them.³²

The fragmentation of the light became an apt image for describing the oneness and multiplicity of the Holy Trinity from Ps-Dionysius the Areopagite on.³³ In virtue of the liturgy the interior of the church came thus to be connected with heaven, the latter imagined largely in terms of light.³⁴ Sunlight pouring in through the windows came thus to be addressed as indicating the interaction between the two dimensions. It was in this vein that middle Byzantine architecture came to rely on a complex dramaturgy of light. The orientation not only the building but also of its apertures helped create a hierarchy of spaces and, according to the thesis of lakovos Potamianos, also within the iconographical program.35 The differentiation between spaces and scenes receiving direct and those receiving reflected light became part of the mise-en-scène of the liturgy and of the visual theological discourse. The importance of the matter transpires from the coordination of the apertures with the decoration. As noticed by Liz James, mosaicists came to take into account the position of the church's openings, adapting accordingly within the mosaic the play of light and shade.36 The onlooker was thus offered a partial, yet much appreciated sight of the divine realities as he or she entered the reflection of the heavenly temple. The relation between the heavenly temple and the church was, as we have seen, underlined through the orchestration of the latter's constitutive elements. Vibrating with chant the

golden mosaic background's materiality grew uncertain and the characters depicted on it came forth, facilitating the idea that as the liturgy progressed the church was engulfed by its prototype.³⁷

The orientation of the church and its windows in order to receive natural light in certain moments and places appears thus as part of a visual rhetoric meant to legitimize the church's participation into the higher dimension, the ever-growing degree of coordination between theology, architecture, and decoration testifying to the continuous interest in the matter. At Hosios Loukas, the light of the various theophanies depicted on the walls is white. The chromatic choice was certainly influenced by the need to contrast and detach that light from the predominant golden background. The white rays, nevertheless, have a direct correspondent in the sunrays that cut through the interior of the church, sieving through finely chiselled openings.³⁸

A growing number of studies evince the care shown by Byzantine architects to coordinate the church space, through the positioning of the building and its openings, with the path of the sun.³⁹ It becomes evident that the windows grew fundamental in the orchestration of the ritual, functioning as triggers in the performance of the liturgy. As already argued, the church space was a visual enactment of a theological reasoning that overlapped the church with the heavenly temple, light becoming the catalyst in the inszenierung.

In the West

Apart from taste, building capacity, and conceptual differences one needs to consider also the difference in sunlight when dealing, in a comparative manner, with Byzantine and Western architecture. Larger openings are required in Tours than in Resafa in order to obtain the same overall amount of light in the interior of the church. Illumination was also not the only effect windows had on the interior, the openings influencing also the ventilation and temperature of the space and the West was generally colder that the Byzantine regions.⁴⁰ The ever-changing dimension of windows, a characteristic of Western church architecture from Late Antiquity to modern times, is thus to be attributed to negotiations between the functional and the theoretical. Nevertheless, for the Early Middle Ages a coherent, conceptually based attitude towards windows can be discerned from the extant sources.

As argued in the introduction, the latter was largely dependent on the overall perception of the church space. The cultural mutations specific to the western space in the Early Middle Ages transformed the interior of churches into a space of refuge. Appearing as an enclave of culture, sacredness, and peace in an otherwise unstable world, the interior of the church expected little from the outside. This attitude transpires in a rather obvious manner from descriptions of

windows which are indicated as a *limen*, a threshold marking the passing from the consecrated space of the church to the outside world. Such a perception was certainly facilitated by the nature of the windows which, having rather small *oculi* filled with glass or selenite, annulled the impression of 'opening'. Indeed, their recurrent description as fields of flowers or rainbows, as decorative panels thus, appears rooted in this effect of the visible, seemingly illuminated, yet non-transparent glass panels.

At first glance the western medieval authors' tendency to reuse, when describing windows, metaphors developed by Late Antique writers appears to carry little, if any, historical relevance. Nevertheless, as we will argue, behind these *topoi* stands not only the appreciation of their rhetorical beauty but also the perpetuation of an attitude towards windows.⁴¹

One must start its analysis on the role of windows in the Late Antique West in two unlikely places: pagan temples and church iconography. The former represented the backdrop on which early Christians judged their own cultic structures, the recurrence of their praise of the luminous basilicas sending to such a rhetorical manoeuvre.⁴² The iconographical issue indicates the overall context in which windows were integrated, most Late Antique authors associating them with flowery fields, testifying thus to their decorative perception.⁴³ The interest in organizing the church space as a visual spectacle meant to distract from more traditional and more mundanely-steeped shows, is consistent in the early medieval West. While Augustine, as wonderfully synthesized by Patricia Cox Miller, advocated a non-sensuous dramaturgy, Paulinus of Nola, Prudentius, and Gregory the Great recognized and put to use the potential of the spatial and iconographic mise-en-scène. 44 Meant to 'beguile the senses', decorative programs developed in the West went rapidly from a decorative/educational character to theophanic.⁴⁵ One thus finds amassed in the presbytery and apse of San Vitale all that was possible to visually know of the divine.46 The access as well as 'proper viewing47 of a place that contained all possible visual knowledge of the divine soon became an issue, testifying that it was inside the church that one came looking for a vision of the Most High.⁴⁸

Windows were given a special role in the construction of this 'visual rhetoric of sanctity, ⁴⁹ being praised as a special kind of surface that added to the beauty of the decoration while illuminating it. Sources seem to indicate inside churches the existence of what Nicolas Reveyron has aptly phrased an 'ambiance lumineuse, ⁵⁰ corroborating Gianni Triantafyllide's study on the windows in San Vitale. The Greek scholar analysed the transparency of the glass fragments discovered at San Vitale concluding that the pieces, dated either to the 6th or to the 9th century, had an even smaller light conductibility than the ones now in place. ⁵¹ Should one imagine for San Vitale the effect of such opaque

windows, the resulting image is one of continuity between the green/gold predominating in the decoration and the window surface. The idea finds support in the sources that rarely mention rays in the interior of churches, preferring to describe the interaction of the light with various surfaces on the inside, praising them as producing the light.⁵² If true, scholars should rethink their appreciation of Late Antique church interiors, influenced greatly by the famous dramaturgy of light characteristic of Constantinople's Hagia Sophia, and envision, for the Western part at least, the milky-reddish mist referred to by Venantius Fortunatus:

'Sol vagus ut dederit per stagnea tecta colorem, lactea lux resilit, cum rubor inde ferit.'⁵³

Extant sources refer to windows in just those terms, indicating them not as openings but as a kind of luminous

membrane, part of the decorative and lighting system of the church. Reworking a Late Antique *topos* that praised lavishly decorated buildings for either capturing or producing their own light, ⁵⁴ early medieval authors acclaimed windows for their capacity to capture and recast in the interior the light of the sun. ⁵⁵ As evident in Venantius Fortunatus' formulation of the metaphor, praising them for producing/capturing light resulted in detaching them, and the church space they indicated, even more from the outside:

'tota rapit radios, patulis oculata fenestris [...] tempore quo redeunt tenebrae, mihi dicere fas sit mundus habet noctem, detinet aula diem.'⁵⁶

It is Gregory of Tours who comes to strengthen our contention that windows were addressed as part of the icono-

5 - Figures flanking the window above the depiction of Christ. Santa Maria in Valle oratory, Cividale



graphy rather than as openings. In his numerous references to windows the bishop always points to them as the privileged, semi-transparent media through which the sacredness of the church interior pours outside, into the world, but never the other way around. Outside the church window is only the profane, the unconsecrated space of the mundane, not heaven. Whenever something is entering through the windows it is an undesired intrusion of the mundane within the sacred space on the inside (birds, thieves, soldiers, rain). Concurrently, all that exits through the windows of the church is a reflection of the consecrated nature of its interior, whether it is miraculous light shining forth or sarcophagi of unworthy persons thrown out. Detached from the outside as much as the rest of the interior was, embellishing the decorative program with their luminous surface, windows were, as an anecdote told by Gregory of Tours well indicates, perceived as a form of golden substance.⁵⁷

The perception of the windows as part of the decoration in the west seems to have received a boost during the iconoclastic period. In Rome the Chapel of Zeno and in Cividale the Oratory of Santa Maria in Valle show figures addressing in a movement of reverence and plea the windows they flank. [figs. 4-5] Whether containing an image of Christ, as proposed for the roughly coeval windows in San Vicenzo in Volturno and Jarrow, associated with God through their placing over the image of Christ,⁵⁸ or as we proposed for the windows in Naples, articulated in some other manner, this type of composition transpires that the window was held as representing God/the Divine Light. The latter instance would indicate, on the eve of the iconoclastic dispute, the appreciation of the window as a surface that recalled God while being, to use John Onians' formula regarding columns, 'safely aniconic.' Nevertheless, in the absence of written testimony such a relation remains speculative and, in light of both earlier and later pragmatic appreciation of windows in the West, rather unlikely.⁵⁹

The reaction of the Carolingian court to Iconoclasm led to a formal decision regarding the purpose of church decoration in the West, Pope and Emperor agreeing on the educational role of the iconography. Charlemagne's decree regarding the illumination of churches, sustained by Pope Leo III, reflects thus more than the emperor's gusto for paleochristian style, pointing to this desire to enhance the legibility of the iconography, the latter extended, when the technology allowed it, to the window surface. It is thus less surprising than initially that the sources mentioning the first depicted windows in the West, in the 9th century, refer only to their decorative quality, circumventing any mystical associations that we might have expected.⁶⁰

The process finds its explanation in the conceptualization of the church space, as presented at the dedication of a church by the abbot of Fulda and archbishop of Mainz, Hrabanus Maurus:

'You are well met together today, dear brothers, that we may dedicate a house [domum] to God. [...] But we do this if we ourselves strive to become a temple [templum] of God, and do our best to match ourselves to the ritual that we cultivate in our hearts; so that just as with the decorated walls of this very church, with many lighted candles, with voices variously raised through litanies and prayers, through readings and songs we can more earnestly offer praise to God: so we should also decorate the recesses of our hearts with the essential ornaments of good works, always in us the flame of divine and communal charity should grow side by side, always in the interior of our breast the holy sweetness of heavenly sayings and of the gospel should resonate in memory.'61

The role of the decoration was thus to induce a feeling of catharsis in the onlooker, triggering a transformation of the self. The church interior, its ritual and decoration, mirror not the heavenly temple but the one represented by the human being. As in Byzantium, the process is one of mirroring but what there was the reflection, the church, is here the archetype, moulding onlookers after its image.

Conclusion

The continuos appreciation of church windows as symbols of divine light in the West appaes, in light of our argument, doubtful. ⁶² Apart from their recurrent association with the apostles, which in itself contains a strong iconographical nuance, little evidence can be found to sustain the thesis. Their association with the *interior* of the church and the identification of the latter as *the* sacred space annulled the relation that is specific for the East, where sunlight worked to underline the connection between the building and its heavenly prototype. It was the altar and the martyr's tomb that were the sources of divine power in the Western early medieval church, the windows, just like the rest of the decoration, providing a reflection of that power. The diminution of open surface in the Romanic style is indicative of the trend, the church having little to expect from the outside.

Our short analysis indicates thus that the window in the early medieval West is a barrier not an opening, marking the threshold between the sacred and the profane. It appears that for those describing the interior of cultic buildings the window was a special type of enclosing panel, corroborating Kessler's contention that the interior of Western medieval churches was unable, and unwilling we would add, to transport the onlooker to heaven.

Photographic credits: 1, 3, 4: photo: Vladimir Ivanovici; 2, 5: photo: Christian Opitz Wikimedi

Notes

- ¹ Jeanne Halgren Kilde, Sacred Power, Sacred Space. An Introduction to Christian Architecture and Worship, Oxford 2008, p. 3.
- ² Harold W. Turner, From Temple to Meeting House: the Phenomenology and Theology of Places of Worship, Mouton 1979.
- ³ Francesca Dell'Acqua, Glass and Natural Light in the Shaping of Sacred Space in the Latin West and in the Byzantine East, in: Alexei Lidov (ed.), *Hierotopy. Creation of Sacred Spaces in Byzantium and Medieval Russia*, Moscow 1996, pp. 299–324, esp. p. 305. Little attention seems to have been paid to the effect that glazed windows as well as the light that passed through them, had on the beholders.
- 4 Herbert L. Kessler, Spiritual Seeing: Picturing God's Invisibility in Medieval Art, Philadelphia 2000, p. 144.
- ⁵ On the Late Antique taste for brilliance, radiance, and connected phenomena see: Michael Roberts, *The Jewelled Style: Poetry and Poetics in Late Antiquity*, Ithaca 1989. Patricia Cox Miller, The Little Blue Flower Is Red: Relics and the Poetizing of the Body, *Journal of Early Christian Studies* 8.2, 2000, pp. 213–236. Dominic Janes, *God and Gold in Late Antiquity*, Cambridge New York 1998.
- ⁶ For the western medieval world the sources mentioning windows were conveniently grouped by Francesca Dell'Acqua, «Illuminando colorat» La vetrata tra l'età tardo imperiale e l'Alto Medioevo, Spoleto 2003 (Studi e ricerche di archeologia e storiadell'arte 4). For the Byzantine world such an instrument is still to come.
- ⁷ As visible in the depiction of the temple of Dagon in the synagogue of Dura Europos and those of the Jerusalem temple on the triumphal arch in Sta. Maria Maggiore in Rome, the interior of traditional temples was perceived as dark. Allegations regarding Christians who, during their rites, turn off the lights and engage in licentious behaviour are recurrent in the applopetic period.
- ⁸ On the mausoleum and other Ravennate buildings see Friedrich Wilhelm Deichmann, *Ravenna: Hauptstadt des spätantiken Abendlandes*, 5 vols., Wiesbaden 1969–1980.
- ⁹ In the scene representing St. Lawrence the window is associated with the effect of the burning fire while in the other ones the opening intermediates between the heavenly light and the depictions of water. It appears thus that the placing of the windows was meant to underline the glistening nature of the three substances (divine light, fire, and water) present in the iconography.

 ¹⁰ In the 4th and 5th century baptism was fixed as part of the Easter vigil. Although in certain regions alternative dates were observed, along with Easter, the nocturnal character of the rite in this period is clear. For the baptistery in Naples see the studies by Jean Louis Meier, *Le baptistère de Naples et ses mosaïques: étude historique et iconographique*, Fribourg 1964. Katia Gandolfi, Les mosaïques du baptistère de Naples: programme iconographique et liturgie, in: Serena Romano Nicolas Bock (eds), *Il Duomo di Napoli dal paleocristiano all'età angioina*, Napoli 2002, pp. 21–34. Olof Brandt, *Battisteri oltre la pianta: gli alzati di nove battisteri paleocristiani in Italia*, Città del Vaticano 2012.
- 11 Despite the fact that an important part of the ritual's inszenierung was relying on its secret character and that for protecting the latter the baptistery seems to have been closed save for the one night, due to local particularities of the ritual mise-en-scène a daytime use of the building in Naples cannot be excluded.
- ¹² The spatial incongruence between the real and the illusory openings indicates that either the artist chose to disturb the otherwise symmetrical pattern through the insertion of depicted apertures in a position that does not match with that of the actual windows, or that the latter were not to be perceived as windows and the illusory ones were meant to underline just that.

 ¹³ Cfr. Karl Lehmann, The Dome of Heaven, *The Art Bulletin* 27/1, 1945, pp.
- ²⁵ Cfr. Kan Lenmann, The Dome of Heaven, *The Art Bulletin* 27/1, 1945, pp. 1–27, esp. pp. 19–20.
- 14 Ibidem.
- ¹⁵ For the study of the Neonian baptistery fundamental remain Deichmann (see note 8). Spiro K. Kostof, *The Orthodox Baptistery of Ravenna*, New Haven London 1965. Ivan Foletti, Saint Ambroise et le Baptistère des

- Orthodoxes de Ravenne: autour du "Lavement des pieds" dans la liturgie baptismale, in: Ivan Foletti Serena Romano (eds), Fons Vitae: baptême, baptistères et rites d'initation (II^e–VI^e siècle), Roma 2009, pp. 121–155. Cetty Muscolino Antonella Ranaldi Claudia Tedeschi (eds), Il Battistero Neoniano. Uno sguardo attraverso il restauro, Ravenna 2011.
- ¹⁶ The Orthodox baptistery in Ravenna as reflecting a complex ritual meant to enact the transformation of the baptizand into a Christic will be addressed in a subsequent article.
- 17 The 4^{th} and 5^{th} -century baptismal ritual was a complex enculturation mechanism, habituating catechumens to see the world through a set of Christian patterns and preparing the correct apprehension of the final scene which was meant to be theophanic and cathartic.
- 18 A vision of the starry sky on which the Chi-Rho was projected also appears in the baptistery of Albenga and the archbishops' chapel in Ravenna while in the Mausoleum of Galla Placidia the stars frame a golden cross.
- ¹⁹ By ritually dying and resurrecting with Christ in baptism, the catechumen was granted access to a future state. The neophyte's sanctity, symbolized by the luminosity of its body as it exited the font, was momentary, the Fathers stressing in post-baptismal catecheses that although real the transformation was a progressive process. In the iconography of the Orthodox baptistery in Ravenna it is visually underlined the moment of transformation, when the otherwise notoriously unavailable sight of God transformed one after His image as the font mirrored the cupola, but the ritual continued in the next weeks, the difference between the baptizand and Christ and the distance one still had to cover to reach heaven being underlined.
- ²⁰ For the popularity of the motif see Apuleius *Metamorphoses* 11.23 and the so-called *Mithras Liturgy*, esp. lines 548–552 and 625–628 (Hans Dieter Betz (ed., trans.), *The "Mithras Liturgy"*. *Text, Translation, and Commentary*, Tübingen 2003).
- ²¹ See the argument in Dell'Acqua (see note 3), p. 302.
- The rhetoric of materials used in the decoration as well as their meaningful pairing with iconographical subjects testifies the conscious manner in which a most sublime sight was sought. To give just one example, in San Vitale silver mosaic tesserae were intercalated in the golden background due to their higher capacity to reflect light without altering the golden effect that was most cherished, and the theological importance of the characters was underlined through the use of gold tesserae of various quality.
- ²³ On the relevance of the materials used in Late Antique churches and their capacity to flesh out an image of heaven see Janes (see note 5). See also the interesting contribution of Bissera Pentcheva, Hagia Sophia and Multisensory Aesthetics, Gesta 50/2, 2011, pp. 93–111.
- ²⁴ Cfr. Ex 40.35, 1Kings 8.10-1 and 2Chron 5.13-14 where the Glory of God fills the tabernacle, respectively the Temple, preventing the priests from entering a space that it had occupied with its presence. The location of the Shekinah inside the Holy of Holies, above the Ark and between the wings of the cherubim, is very precisely indicated, transpiring the need to locate the divine, not only to associate it with a certain structure.
- ²⁵ Procopius *De aedificiis* I.1.23ff. "And so the visitor's mind is lifted up to God and floats aloft, thinking that He cannot be far away, but must love to dwell in this place which He himself has chosen..." (trans. Cyril Mango, *Art of the Byzantine Empire*, 312–1453: Sources and Documents, Toronto 1986, p. 76).
- ²⁶ Paulinus of Nola, *Carm.* 27.513-515 (CSEL 30:284).
- ²⁷ Another Sogitha 13–4 (Kathleen E. McVey (ed., trans.), The Domed Church as Microcosm: Literary Roots of An Architectural Symbol, *Dumbarton Oaks Papers* 37, 1983, pp. 91–121, esp. p. 95).
- 28 Germanus I of Constantinople (trans. Robert F. Taft, *The Byzantine Rite: A Short History*, Collegeville 1992, p. 18). The 6h -century hymn from Edessa begins by praising the building as the place where God dwells.
- ²⁹ On the matter and its evolution in the Byzantine tradition see the contributions in the recent volume edited by Sharon E. J. Gerstel, *Thresholds of the Sacred: Architectural, Art Historical, Liturgical, and Theological Perspectives on Religious Screens, East and West*, Cambridge 2006.
- ³⁰ Cfr. Ex 25.9; 25.40; 26.30.
- ³¹ The process is most evident in the Cherubikon hymn, introduced towards the end of the 6th century. On the latter see Robert F. Taft, *The Great*

Entrance: a History of the Transfer of Gifts and Other Preanaphoral Rites of the Liturgy of St. John Chrysostom, Rome 1975.

- ³² Maximus the Confessor *Mystagogia* 669A, emphasis mine. (trans. Dom J. Stead, *The Church, the Liturgy and the Soul of Man: the Mystagogia of St. Maximus the Confessor*, Still River 1982, pp. 68–70). On the matter see Evangelia Hadjitryphonos, 'Divinity' and 'World'. Two spatial realms in the Byzantine Church, in: Lidov (see note 3), pp. 237–259 and Pascal Müller-Jourdan, *Typologie spatio-temporelle de l'ecclesia byzantine: la Mystagogie de Maxime le Confesseur dans la culture philosophique de l'antiquité tardive*, Leiden 2005, pp. 127–198.
- 33 Ps.-Dyonysius *On the Divine Names* 2.4 used the image of lamps but the one whom he nominated as his teacher, Hierotheus, referred to windows cfr. *The Book of Holy Hierotheus* 4.21; cfr. McVey (see note 27), pp. 102–103, note 71.
- 34 Already in the apocalyptic/visionary literature developing in the period between the 1st century B.C. E. and the 1st century C. E. heaven came to be envisioned as light. In John's Revelation Christianity received a complex and coherent image of heaven as a city made of luminous substances. Secondand third-century martyr visions reinforced the idea which eventually generalized, catching on especially in the Syriac milieu.
- 35 lakovos Potamianos, *Light into Architecture: Evocative Aspects of Natural Light as Related to Liturgy in Byzantine Churches* (PhD Diss.), University of Michigan 1996 (published as *Το φως στη βυζαντινή εκκλησία*, Athens 2000).
 36 Liz James, *Light and Colour in Byzantine Art*, Oxford 1996, p. 6.
- ³⁷ On the sound in Hagia Sophia see Pentcheva (see note 23) and on the relation between the golden mosaic and chanting see Tania Velmans, *La visione dell'invisibile. L'immagine bizantina o la trasfigurazione del reale: lo spazio, il tempo, gli uomini, la morte, le dottrine*, Milano 2009, pp. 35–36.
- ³⁸ If the original glass panels were as they are today, transparent.
- ³⁹ Apart from Potamianos (see note 35), the matter has been recently addressed in numerous articles by Nadine Schibille, The Use of Light in the Church of Hagia Sophia in Constantinople: The Church Reconsidered, in: Peter Draper (ed.), *Current Work in Architectural History, Papers Read at the Annual Symposium of the Society of Architectural Historians of Great Britain, London, 2004*, London 2005, pp. 43–48. Eadem, Astronomical and Optical Principles in the Architecture of Hagia Sophia in Constantinople, *Science in Context* 22, 2009, pp. 27–46. Eadem, Light as an Aesthetic Constituent in the Architecture of Hagia Sophia in Constantinople, in: Daniela Mondini Vladimir Ivanovici (eds), *Manipulating Light in Premodern Times/Manipolare la luce in epoca premoderna*, Cinisello Balsamo Milano (forthcoming). Elza S. Tantcheva, Colour and Light in the Post-Byzantine Church Architecture in the Town of Arbanassi, Bulgaria, in: Pietro Zennaro (ed.), *Colour and Light in Architecture, Proceedings of the international conference held 11–12. 11. 2010 at IUAV*, Verona 2010, pp. 25–31.
- 40 Windows that opened were not yet developed in the period we are dealing with. When we refer to 'apertures' or 'openings' we have in mind the perception of these surfaces. Despite being fixed the windows did influence the ventilation and temperature of the spaces due to the technique in which they were made.
- ⁴¹ Often researchers address *topoi* with the suspicion that they have little, if any, relation with the objective context. Nevertheless, as argued by sociologists, cultural patterns and motifs that lose their relevance are replaced. The use of metaphors completely detached from contemporary perception only in virtue of their association with a golden age would have rapidly lost its meaning.
- 42 Technical advancement allowed the increase of open surface in buildings from the time of Constantine thus their praise as luminous appears justified. See the discussion and bibliography in Dell'Acqua (see note 6), p. 17, note 13. 43 From Prudentius, through Venantius Fortunatus and Gregory of Tours, to Anastasius Bibliotecarius, thus from the 5th to the 9th century, Western authors refer to the church windows' capacity to imitate rainbows or fields with flowers, using an image which, as argued by Miller (see note 5) implied a particular and complex set of associations.
- 44 On different techniques of fleshing-out spiritual 'spectacles' in Late Antique Christianity see Patricia Cox Miller, *The Corporeal Imagination: Signifying the Holy in Late Ancient Christianity*, Philadelphia 2009.

- ⁴⁵ The beguiling of the senses is a phrase used by Paulinus of Nola *Carm*. 27.542–595 (CSEL 30:287–288), referring to a process that is also mentioned by Gregory the Great *Ep*. 9.208. Extant decorations from Ravenna and Rome testify that in a second phase of Christian building the iconography was designed specifically with the purpose of offering a vision of God. E.g. the apse decoration from San Michele in Africisco with Christ holding the gospel open at John 14.9.
- ⁴⁶ San Vitale appears as much Western as it is Eastern. We decided to ascribe it to the Western tradition because we consider it indicative of the latter's its development. On the church see Deichmann (see note 8). Clementina Rizzardi, *S. Vitale di Ravenna. L'Architettura*, Ravenna 1968. Eadem, San Vitale: l'architettura, in: P. Martinelli Angiolini (ed.), *La Basilica di San Vitale a Ravenna*, Modena 1997, pp. 21–40.
- ⁴⁷ Phrase coined by Cynthia Hahn, Seeing and Believing: The Construction of Sanctity in Early-Medieval Saints' Shrines, *Speculum* 72, 1997, pp. 1079–1106. Paulinus of Nola was careful to control the apprehension of the churches and their decoration, installing explicatory inscriptions. Another method to control the perception of he church space was through the catechetical process, a complex enculturation mechanism developed in Late Antiquity.
- 48 In San Vitale the three main OT theophanies are represented (the angels at Mamvre, Moses at the burning bush, and Moses on Sinai), along with the three 'faces' of Christ (the Incarnated, the eternal Logos, and the Lamb), the heavenly Jerusalem, and all other degrees of embodied Divine Glory (apostles, martyrs, emperors).
- 49 Hahn (see note 47), p. 1079.
- 5º Nicolas Reveyron, Ambiances lumineuses et ambiances colorées dans l'architecture religieuse du Moyen Age occidental, in: Mondini – Ivanovici (see note 39).
- 51 Gianni Triantafyllide, Στοιχεία φυσικού φωτισμού των βυζαντινών εκκλησιών, Athens 1964, p. 98.
- ⁵² Sun rays coming trough the windows are mentioned only twice, the rest of the mentioned rays being produced by the interaction between light and the decoration.
- 53 Carm. 3.7.37–38 (Marc Reydellet Venance Fortunat (eds), *Poèmes*, Tome I, Livres I–IV, Paris 1994, p. 96).
- 54 Between Nero's Domus Aurea and Justin II's palace in Constantinople, imperial residences and cultic buildings have been praised for producing, through the decoration, their own light. See the sources mentioned in Fabio Barry, The House of the Rising Sun: Luminosity and Sacrality from Domus to Ecclesia, in: Alexei Lidov (ed.), *Light and Fire in the Sacred Space. Materials from the International Symposium*, Moscow 2011, pp. 51–53.
- ⁵⁵ Found already in Paulus Silentiarius' *Descriptio Sanctae Sophiae* 1.1.30 the image of the window as capable of withholding and recasting the exterior light in the inside of the church is present in the West in Sidonius Apollinaris, Venantius Fortunatus, Aldelmus, and Sedulius.
- ⁵⁶ Carm. 3.7.47-50, ed. Reydellet (see note 53), p. 97).
- ⁵⁷ Gregory of Tours, *The Glory of Martyrs* 58 tells of a thief who stole and melted the windows thinking that they are made of gold. It is perhaps telling of the effect the windows, in this case probably not of varied colour but of brown-yellowish hue that was easiest to obtain in the period, had on the regular onlooker.
- 58 The relation exists in both cases. On the windows in Jarrow and Volturno see the reconstructions and discussion in Dell'Acqua (see note 6), tav. 18, 26. 59 For the window in Cividale see Hans Peter L'Orange Hjalmar Torp, Il Tempietto longobardo di Cividale, 3 Vols., vol 3, Rome, 1977–1979, pp. 20, 115–127. For the scholarly tradition that 'reads' this type of setting as a reference to Christus lux see the bibliography quoted by Erik Thunø, Image and Relic: Mediating the Sacred in Early Medieval Rome, Rome 2002, pp. 143–144, note 389.
- 60 See the texts of Ratpertus and Flodoardus in Dell'Acqua (see note 6), pp. 127–128.
- ⁶¹ Hrabanus Maurus, *Hom.* 39.73–74, emphasis mine (trans. Mary Carrurthers, *The Craft of Thought. Meditation, Rhetoric, and the Making of Images* 400–1200, Cambridge 1998, p. 275).
- 62 Dell'Acqua (see note 3), p. 306.