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Manipolare la luce in epoca premoderna

**Manipulating Light
in Premodern Times**

a cura di / edited by
Daniela Mondini, Vladimir Ivanovici

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Manipolare la luce in epoca premoderna

Manipulating Light in Premodern Times

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Aspetti architettonici, artistici e filosofici

Manipulating Light in Premodern Times Architectural, Artistic, and Philosophical Aspects

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Economia della luce
nelle chiese paleocristiane e bizantine

The Economy of Light
in Early Christian and Byzantine
Churches



Vladimir Ivanovici

«Luce renobatus»

Speculations on the Placement and Importance of Lights in Ravenna's Neonian Baptistery

Hanging lamp with a hand holding a cross, 6th or 7th century, Byzantine (The Metropolitan Museum of Art, The Cloisters Collection, 1974).

Crystallised between the 3rd and the 5th century as one of the key moments in the life of Christian communities, baptism was perceived as a ritual re-enactment of Jesus'. Due to an apocryphal tradition that placed a light theophany at His baptism the sacrament came to be associated with light very early on.¹ The choice, in the early 3rd century, of a nocturnal setting appears related to the appreciation of artificial lights as capable of recreating the theophanic effect.² Baptism thus provides one of the first venues for the study of early Christian symbolism attributed to light in ritual context.

The language of illumination which came to characterise the sacrament can thus be related not only to the symbolism of the act but also to the peculiarities of its physical enactment.³ Orchestrated as a theophanic experience, Late Antique baptism relied on lights to substantiate the Divine Glory. As Geir Hellemo noticed:

*The rite itself, by means of its visual character, creates the basis for the eyes' contemplation which opens the way for an interpretative image of the events reproduced by the ritual. The rite provides the external condition for outer as well as inner visual processes in those participating in it.*⁴

The setting provided both the momentary vision of heavenly realities and a life-long memory of it, light transpiring from the sources as a key element in the mise-en-scène. Despite the ritual's complete dependency on artificial illumination and the abundance of literary and architectural sources, modern scholars have not addressed the relation between the two beyond the obvious.⁵ Furthermore, when dealing with baptisteries, the aspect of their nocturnal use is almost always overlooked although, we believe, it changes fundamentally the perspective on the building and the ritual it hosted. Given the element's importance we will reconstruct the minimal functional and symbolic illuminative requirements using the Neonian or Orthodox Baptistery in Ravenna as case study. Given that no original illuminative

setting survived, we rely on a careful analysis of structural forms, rhetoric of decorative materials, iconographic expressions, and theology.

Light and Lighting in the 4th- and 5th-Century Baptismal Ritual

The ritual was reorganised in the 4th century by the Church Fathers, its fundamentally mimetic character being replaced by an imagery of death and rebirth drawing on Paul's *Epistle to the Romans* 6.3-9. Placed in the context of Adamic Christology, baptism came to be credited with the change of the neophyte's ontological foundation from Adam to Christ, engendering the development of a complex imagery which, among other motifs, posited the neophyte as a Christ-like figure and the baptistery as Eden. The baptistery was thus the setting of a ritual death and rebirth, a contrast that was enacted visually by the opposition of the dark, unsettling water of the font with the lavishly decorated scenes of the upper registers. The construction of baptisteries as individually standing buildings follows from this process of reconceptualising, with the obvious purpose of providing a physical scene for the enactment of a theophanic ritual that fleshed out the Christian salvation history and eschatological promises.⁶

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In an often-quoted study on the development of baptism, Edward Yarnold related the reformation of the sacrament to Graeco-Roman initiation ceremonies that often relied on a stark contrast between dark and luminous spaces, the latter presented as theophanic.⁷ Indeed, the practice described by Cyril and the other Fathers who adopted the Pauline death/rebirth imagery appears to draw on the secular experience of mystery initiations being a complex mechanism of enculturation that relied on the ritual's impact on the physical senses.⁸ Organised as a succession of visual, spatial, and epistemic thresholds the ritual was designed to increase tension and build expectations that would be eventually fulfilled in the baptistery.⁹

The rite began with a forty days preparation that was both physically and psychologically demanding. Apart from catechism and deprivation of food, sleep, and personal hygiene, the *photizómenoi* also endured the constant stressing of their unworthiness.¹⁰ At the end of the preparation, characterised by recurrent emphasis on baptism's dangerous and "awe-inspiring" nature, the catechumens were taken to the baptistery at night, stripped naked, anointed, and immersed into the font's water.¹¹

Identified as the process through which the human being regained the Divine Image and Likeness lost by Adam, baptism was presented as a one's return to Eden. As it exited the font, the body of the neophyte was indicated as representing the luminous Image of God that Adam first bore, the act of chrismation, the full-body anointment that preceded one's immersion in the font, producing Christs (literally: anointed ones).¹² As the wet and anointed body of the neophyte reflected the light cast by the lamps and candles present in the baptistery the luminous Glory that had vested Adam before the Fall became visible, symbolising the believer's return to Eden.¹³

The symbolism invited thus the use of as many lights as possible in the mise-en-scène, Cyril of Jerusalem referring to the night of baptism as "... that night, the darkness which shines like the day..."¹⁴ The nomination of the baptistery as *photistérion* (place of illumination) indicates its perception as fundamentally luminous. In Ravenna bishop Peter Chrysologus (c. 380-451), Neon's predecessor and main theo-

logian of the Western capital, attests the use of the ritual's luminosity as indicative of heaven:

*Intelligite, filioli, quanta perfectorum, quanta fortium gloria sit et potestas, quando tanta uirtus in ipso conceptu, tanta maiestas aperitur in partu.*¹⁵

Furthermore, the bishop of Ravenna constructs in his sermons the case of the neophyte exiting the font as the visible image of Christ, a luminous sight that provided the onlookers with a theophanic spectacle.¹⁶ For Chrysologus the font, assimilated to the Virgin's womb in order to emphasise the Christic character of the baptisands, gave birth to neophytes "*reformati ad nostri imaginem creatoris*".¹⁷

The Orthodox Baptistry

Late Antique Ravenna is part of a cultural current that between the 4th and the 6th century appreciated light and its manifestations (reflections, radiance, brightness etc.) as symbols of theophany.¹⁸ Preserving the material expression of a theology and aesthetic of light known mainly from literary sources, Ravenna's buildings allow us to glimpse at the material context through which a new, essentially luminous aesthetic taste was disseminated along with a new conceptualisation of cultic structures as containers of theophanic sacraments. Regarding the illumination of these spaces little is known, extant sources mentioning only Galla Placidia's "*lucernam cum cereo-stato ex auro purissimo*" and Theodoric's donation to St. Peter's in Rome of two silver candlesticks weighting c. 30 kg.¹⁹

The Orthodox Baptistry was built in a less ostentatious manner by Bishop Ursus (*sed.* c. 399-c. 426) and restored by Bishop Neon (*sed.* c. 450-475), the result of the intervention being a double structure, "an internal aerial structure in the form of a baldacchino and an external shell which, essentially unconnected with the vault and arcades inside, provided for them a simple, solid sheath".²⁰ The building follows the Milanese octagonal pattern, originally alternating on the ground floor protruding niches with doors. Above the floor level eight windows open while the upper third of the structure provides the shell for the *tubi fittili* cupola. Partially engulfed by the swampy terrain, the baptistry's original pavement stands now 3 m below the present one. The alteration modifies the perception of the interior as it was intended by its designer, affecting the immediacy of the solar motif dominating the cupola's decoration and the relation between the separate decorative zones.

Fig. 1

The presence of eight large windows (2.4x1.4 m) on a building designed to be used nocturnally can find various pragmatic explanations but only one symbolic effect: as with other aspects pertaining to the catechetical process the bishops paid attention to details that increased the unbaptised persons' curiosity, attracting them thus to conversion. Physically, visually, and epistemically secluded from the ritual, non-Christians saw through the windows the impressive light present inside the baptistry, their interest in participating growing. Inside, the windows provided a glassy surface on which the flickering of the artificial lights played, adding to the general luminosity of the scene. Of the original artificial lighting system nothing remains ex-



Figure 1.
Ravenna, Orthodox Baptistery,
c. 450. Decoration of the
cupola with indication of the
eight holes
(photo V. Ivanovici 2011).

Figure 2.
Section of the Orthodox
Baptistry after Neon's
restoration (after Kostof 1965),
with the position of the
monumental chandelier
(graphic development L. Pini).

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cept for eight holes in the cupola, the existence of which was related to individual hanging lights by Guglielmo De Angelis d'Ossat.²¹

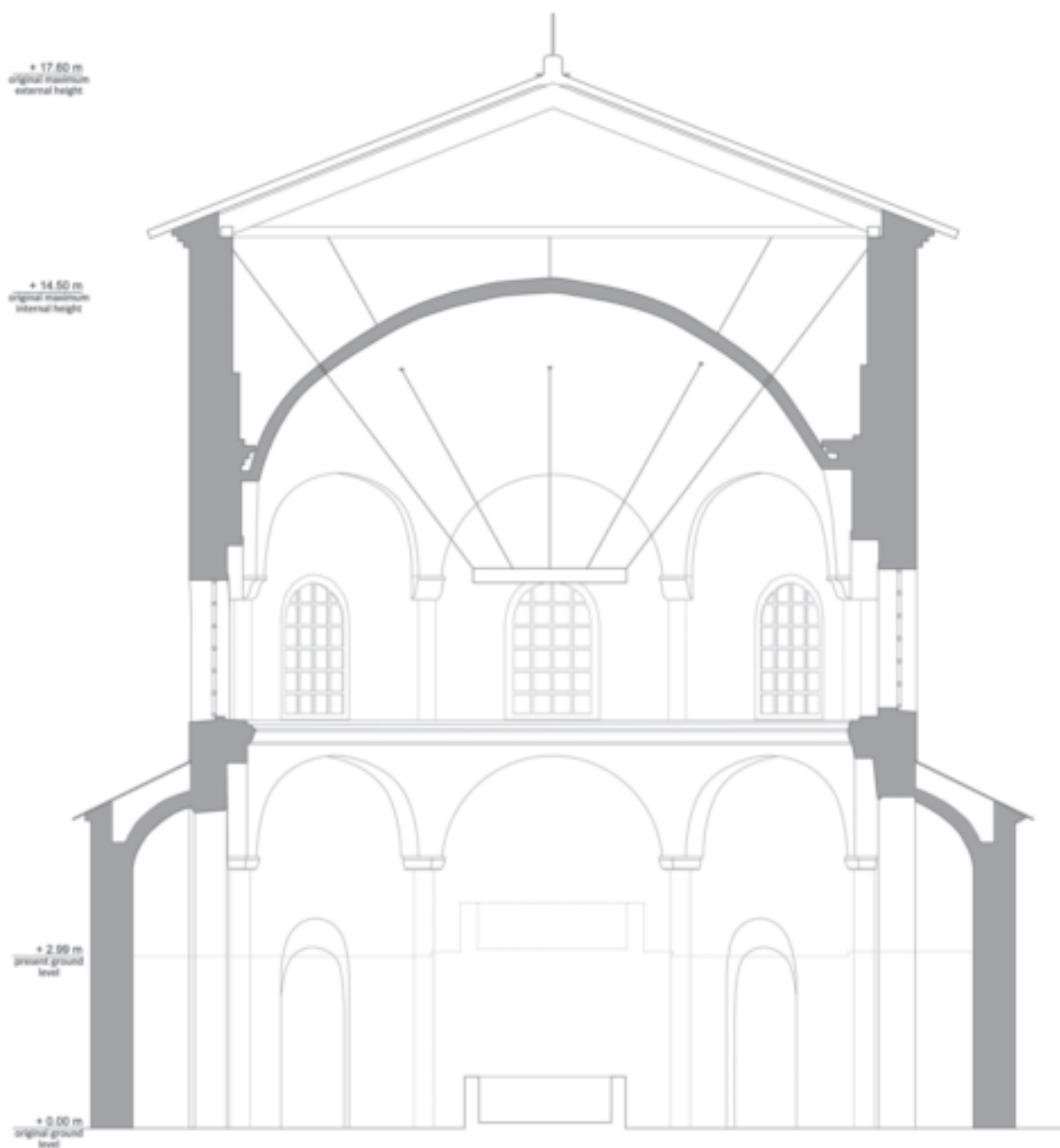
Speculations on the Placement of the Lights

The ritual's complexity imposed the clear identification of the key visual points inside the baptistery, three areas transpiring from the sources as essential: the vertical axis uniting the cupola with the font, the main niche where the bishop sat, and the opposing part where Christ tramples on the Devil.²² In the Neonian decorative program their importance is attested by the rhetoric of materials. Profiting from the recent invention of golden glass mosaic, the designers used it in areas important to the ritual, this most luminous texture and hue inviting the presence of flickering light sources.

The main focus was the cupola's central scene for which, we believe, a large chandelier was used. The eight holes piercing the cupola were related by De Angelis d'Ossat with individual hanging lights, thesis contested by Claudia Tedeschi. Having the opportunity to observe closely the hole to the right of Simon Cananeus, Tedeschi argued that due to the fact that the transversal tube used to produce the hole did not advance to the rim of the mosaic decoration, the rope or chain of a hanging light would have applied pressure directly on the mosaic layer.²³ Despite its resilience, the structure of the cupola is very delicate (only 25 cm thick) and such a pressure would have affected it or at least damaged the mosaic by rubbing against it. The use of a centrally placed chandelier had the advantage of collecting the eight strings and, if placed in the right position (the holes have a 15° inclination)²⁴ annul the pressure by balancing the weight forces. Centrally placed lighting devices are

Fig. 1

Fig. 2



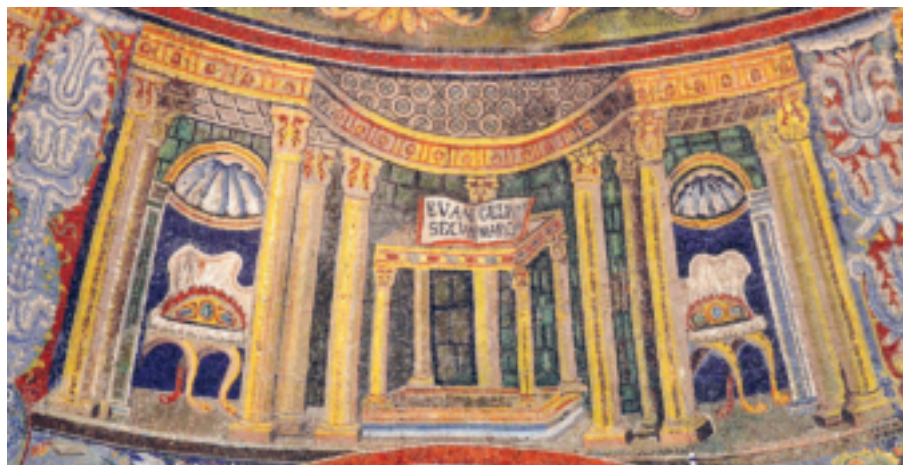


Figure 3.
Ravenna, Orthodox
Baptistry, c. 450,
mosaic decoration detail
(photo V. Ivanovici 2011).

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attested in baptisteries by the Roman *Liber Pontificalis* mentioning Constantine's donation of a twelve-flame *lucerna aurea* to be placed *super fontem* in Sant'Agnese fuori le mura's baptistery.²⁵ Monumental chandeliers are mentioned by the same source in 4th-century Rome and related with baptistery-like buildings in the mosaics of the Thessaloniki Rotunda, probably of the 5th century.²⁶

The use of a central, round chandelier is supported not only by the inclination of the holes but also by the scene's iconography. Organised as a sun, with the baptism in the Jordan on the disk and the apostles and vegetal candelabra as rays, the motif has a number of Christian and non-Christian connotations that would have been clear for the Late Antique catechumen.²⁷ The assimilation of Christ with the sun as well as the postulation of the latter as main catalyst of a vision during initiation into a cult, two notorious Late Antique elements, were thus overlapped in the cupola. It is our contention that the scene

Fig. 4

Fig. 1

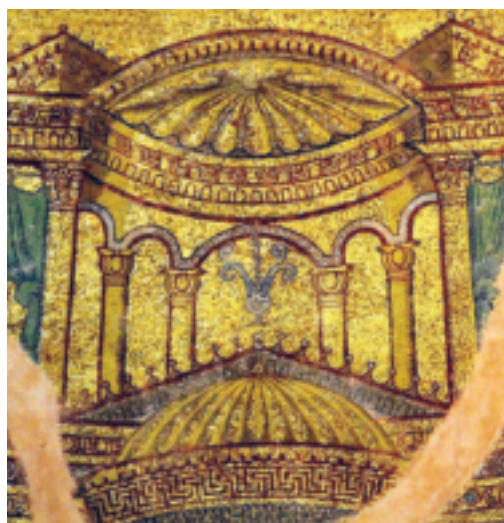


Figure 4.
Thessaloniki, Rotunda,
detail of the mosaic
in the cupola
(photo D. Diffendale 2011).

Figure 5.
Ravenna, Orthodox
Baptistry, c. 450,
mosaic decoration detail
(photo V. Ivanovici 2011).

presents Christ as the sun and source of light for the baptistery, an enactment of John's description of the heavenly Temple in Rev. 21.23:

And the city had no need of the sun, neither of the moon, to shine in it: for the glory of God is its light, and the Lamb is its lamp.

Fig. 3, 6

The display of golden mosaic tesserae corroborates the solar thesis, testifying to the designer's awareness of their privileged relation with light and their deliberate placement in a manner that augmented the solar reference. The pieces are arranged in longitudinal stripes that enhanced the perception of the scene as a radiating sun.

Fig. 5

On a lower level, corresponding to the eight holes in the cupola and the windows, there are eight metal rings which could have been used to hang individual lights or, more likely, for a more complex illuminative scheme that, hanging at the level of the windows, would have interacted with their reflective surface. Further down the walls, the texts on the niches' arches, as well as the prophets placed on a golden mosaic background invite proper illumination. The ledge level most certainly hosted a series of hooks from which lamps could hang after the manner attested in 6th-century churches like Hagia Sophia in

Figure 6.
Display of golden mosaic tesserae in the decoration of the cupola of the Orthodox Baptistry, Ravenna (drawing L. Russo, graphic development L. Pini).



Constantinople.²⁸ The niches, originally probably decorated with mosaic at least on the semidomes, required the distinctive illumination of their upper part due to their height. Hanging lights seem appropriate, perhaps of the kind donated in the same period by Pope Hilarius (*sed.* 461-468) to the Lateran baptistery, ten-flame lanterns weighting 2.3 kg.²⁹

The niches' lower half would have most likely been lit by two or four tall candlesticks each, placed on the floor, as well as by smaller candlesticks or lamps standing on furniture. The theophanic character of the main niche, where the bishop stood receiving the neophytes as they exited the font was stronger, sources mentioning the bishop's association during the ritual with a luminous celestial being. It appears thus justified to assume a greater concentration of lights in and around his niche. Along with the latter, the font remains the focal point at ground level. Round, the font was not large enough to hold a central light as the one in Lateran.³⁰ Due to its shape, the entrance and exit points would have been indicated by candlesticks placed on its side, an articulation so common for baptismal fonts that it permeated into their iconography.³¹ Indicating the direction and flanking the priests helping with the immersions, the font's candlesticks also interacted with the water's surface, sources praising the scintillating effect.³²

Upon exiting the font towards the bishop's niche, the neophyte was supposedly

Fig. 7

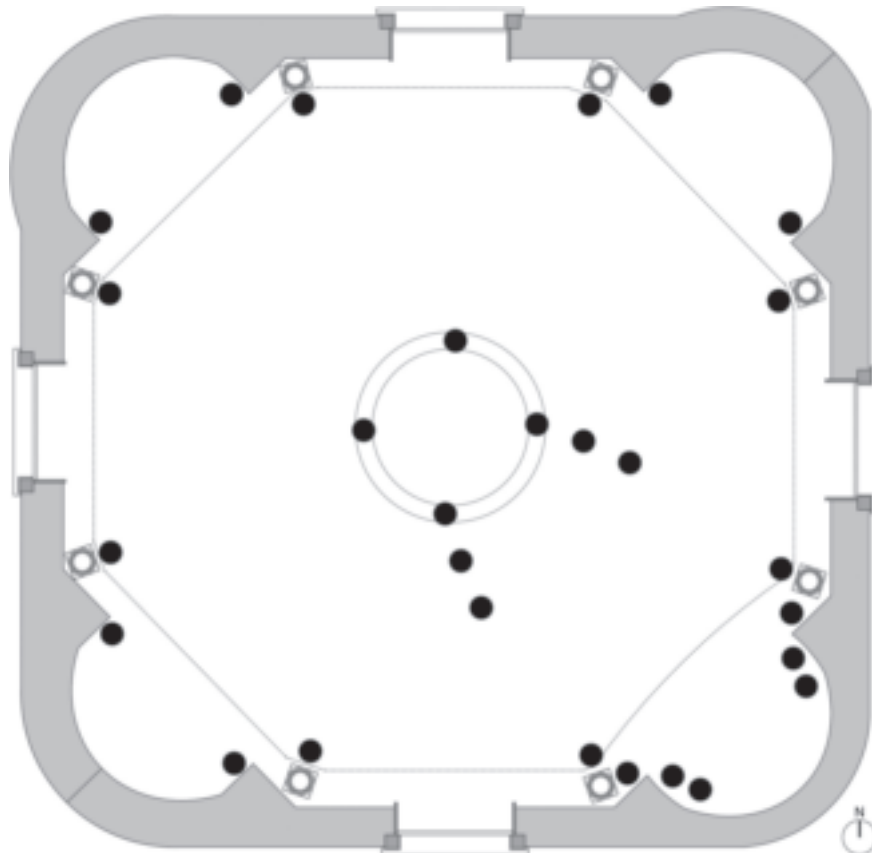


Figure 7.
Proposed distribution of
light sources at ground level,
plan of the Orthodox
Baptistry after Neon's
restoration (after Kostof
1965)
(graphic development
L. Pini).

surrounded by a greater number of lights meant to interact with the anointed and wet surface of his body. The entire area towards the East (SE in the case of the Neonian Baptistery) would have been better illuminated as it stood for the Garden of Eden in which the neophyte now re-entered, after dying and resurrecting with Christ through baptism.

Fig. 7

The exact system remains, of course, outside of our reach. Even a meticulous analysis of the structure promises little due to the number of restorations. Random holes that could be related to various lighting devices are still discernible in many areas of the baptistery but it is difficult, if not impossible, to date them to the 5th century.³³ Thus, for the Neonian baptistery at least, relying on written sources and surface textures seems to be the only relevant course of action. Common sense advocates the use of lights in those parts where golden mosaic, texts, and relevant images were placed. The resulting scheme, overlapped with the one transpiring from the analysis of the ritual, indicates the likely illumination system.

Conclusion

Reliance on a visceral response to an architectural staging of theology seems normative in Late Antique Italy. In light of literary sources, it becomes evident that the motif of the sun posed a central problem in the Christianisation of the north-Italian area, catechetical discourses recurrently addressing the problem posed by belief in astrological determinism and, especially, by the appeal of the sun.³⁴ Chrysologus' description of both Christ and the perfect Christian as resplendent as well as the *mise-en-scène* of the baptismal scene as a visual discourse arguing in favour of Christ as the sun appears thus part of an attempt to harness solar phenomena for Christian use. If read as an enactment of Chrysologus' theology of the neophyte as a Christic figure and of the local assimilation of Christ with the sun and the apostles with His rays, Neon's baptistery evinces the central role played by light in the baptismal process.

Placed by Spiro Kostof at the very passing from Late Antiquity to the Early Middle Ages, the Neonian restoration combines the concept of the sacrament as participating in heavenly realities with the local need to offer a sensible experimentation which, out of necessity but also as a mirroring of local theology, came in the form of light.

Abstract

Sulla scorta dell'analisi della teologia battesimale e dell'iconografia tardoantica, il presente articolo fornisce una ricostruzione degli elementi basilari deputati all'illuminazione del rituale religioso. Il Battistero ortodosso (o neoniano) di Ravenna è stato scelto come caso di studio in quanto presenta una decorazione originale quasi completa, un programma architettonico rappresentativo e una buona documentazione scritta costituita da fonti locali contemporanee alla sua costruzione. Attraverso la sovrapposizione delle informazioni ricavate dai testi con la retorica dei materiali utilizzati nel battistero, analizzati per le loro qualità riflettenti, l'autore propone una ricostruzione delle originarie condizioni di illuminazione dell'edificio.

Notes

- 1. First mentioned in Justin Martyr's *Dial. c. Tryph.* 8.83 written around 160 C.E.
- 2. The early 3rd-century *Acts of Thomas* ch. 26 presents baptism taking place at night in a lavishly illuminated public bath. By the 4th century, nocturnal baptism was generalised.
- 3. On the relation between baptism and illumination see J. Ysebaert, *Greek Baptismal Terminology: Its Origins and Early Development*, Dekker-Van de Vegt, Nijmegen 1962, esp. pp. 171-174. The motif of the light theophany associated with Jesus' baptism permeated into the scene's iconography, the 4th-century catacomb of Marcellinus and Peter and the 6th-century Rabulla Gospel featuring depictions of the event in this form. Even more important for the present study is the early iconographical association of baptism with artificial lights. The first known baptistery, that of Dura Europos, shows the virgins carrying lamps, a 4th-century ivory now in the British Museum includes the scene at Jordan flanked by two candlesticks, while the 6th-century baptistery of La Skhira in Tunisia features a mosaic with numerous lamps. Baptismal fonts are also adorned with images of candles, the one in the cemetery of Ponziano featured a painted cross holding two burning candles right over the font. See also those in Sidi Jedidi and Kélibia discussed below, n. 31.
- 4. G. Hellemo, *Adventus Domini: Eschatological Thought in 4th-Century Apes and Catecheses*, Brill, Leiden 1989, p. 236.
- 5. Regarding the role lights played in the ritual, modern authors limited themselves to underlining the relation between the candle/lamp that was handed to neophytes as they left the baptistery and their souls' newly gained purity.
- 6. Already Cyril of Jerusalem *Procat.* 4 seems to rely on the architectural setting's impact: "Let the very place put you in awe and be admonished by what you see" (trans. A.J. Wharton, *Ritual and Reconstructed Meaning: The Neonian Baptistry in Ravenna*, "Art

Bulletin", 69, 1987, 3, pp. 358-365, 362 n. 20). The sight of God, otherwise notoriously unavailable, appears as a standard promise in catechetical lectures cf. Ambrose *De Myst.* 8, Zeno of Verona *Tract.* 1.23, Theodore of Mopsuestia *Hom.* 2.18, etc.

— 7. E.J. Yarnold, *The Awe-Inspiring Rites of Initiation: The Origins of the R.C.I.A.*, T.&T. Clark-Liturgical Press, Edinburgh-Collegeville 1994² (1971). For various manners in which light was manipulated in ancient and Late Antique initiatory rituals see the process at Eleusis in J.N. Bremmer, *Initiation into the Eleusinian Mysteries: A «Thin» Description*, in C.H. Bull et al. (eds.), *Mystery and Secrecy in the Nag Hammadi Collection and Other Ancient Literature: Ideas and Practices. Festschrift for Einar Thomassen*, Brill, Leiden 2011, pp. 375-397 and Apuleius' *Metamorphoses* 11.21-3. Interesting techniques seem to have been developed in Mithraism during the early empire. See R. Merkelbach, *Mithras: ein persisch-römischer Mysterienkult*, Albus im VMA-Verlag, Wiesbaden 1998, Figs. 55, 62, 87, 99, 134, 145, 164 for the manners in which light was used to enhance the perception of the cult's imagery in the mithraic "caves".

— 8. Ambrose *De Myst.* 1.2 admitted that in his catechetical experience "*deinde quod inopinantibus melius se ipsa lux mysteriorum infunderit, quam si ea sermo aliqui praecurrisset*" (ed. and trans. G. Banterle, *Opere dogmatiche III. Spiegazione del credo. I sacramenti. I misteri. La penitenza*, Biblioteca Ambrosiana-Città Nuova Editrice, Milano-Roma 1982) while Peter Chrysologus of Ravenna, following the Ambrosian tradition, praised baptism as the moment when "*totam satietatem sensibus et mente capiamus*", *Serm.* 57.2.39-41 (ed. and trans. G. Banterle et al., *Sermoni*, 3 vols., Città Nuova Editrice, Roma 1996-1997).

— 9. T.M. Finn, *The Ritual Process and Survival in Second-Century Rome*, "Journal of Ritual Studies", 3, 1989, pp. 69-89, 77.

— 10. North-Africa, as testified by Augustine and Quodvultdeus, seems to have developed the most radical version of the ritual, likening the pre-baptismal period with a martyrial ordeal. See W. Harmless, *Augustine and the Catechumenate*, The Liturgical Press, Collegeville 1995.

— 11. For the sake of efficacy a certain degree of generalization is required. For an overview of the baptismal ritual and theology in early Christianity see B.D. Spinks, *Early and Medieval Rituals and Theologies of Baptism: From the New Testament to the Council of Trent*, Ashgate, Aldershot 2006.

— 12. Pre-baptismal anointing of the whole body was not a general practice, but almost all of the information from the fourth and 5th century mentions some kind of pre-baptismal anointing (whether of the body, head or unspecified). See M. Johnson, *The Rites of Christian Initiation: Their Evolution and Interpretation*, Liturgical Press, Collegeville 1999, esp. the tables on pp. 154, 199.

— 13. Drawing on Paul's *Gal.* 3.27 and playing on the similarity of between ὁ φῶς (man) and τὸ φῶς (light) early Christianity envisioned Adam as a being of light

cast after the Image of God. On this see D.H. Aaron, *Shedding Light on God's Body in Rabbinic Midrashim: Reflections on the Theory of a Luminous Adam*, "Harvard Theological Review", 90, 1997, pp. 299-314; A. DeConick, J. Fossum, *Stripped Before God: A New Interpretation of Logion 37 in the Gospel of Thomas*, "Vigiliae Christianae", 45, 1991, pp. 123-150. Al-ready Origen *C. Cels.* 6.79 and Methodius *The Banquet* 8.8.190-2 address the baptisands as Christs.

—14. *Procat.* 15 (trans. NPNF 2.7.101).

—15. Peter Chrysologus *Serm.* 68.11.106-8, see footnote 7. See also Gregory of Nazianzus *Or.* 40.4 and Ephrem *Hymn on Epiphany* 9.3.

—16. See my forthcoming article on christomorphism in Peter Chrysologus' baptismal theory.

—17. Peter Chrysologus *Serm.* 117.4-5, see footnote 7.

—18. P.C. Miller, «The Little Blue Flower is Red»: *Relics and the Poetizing of the Body*, "Journal of Early Christian Studies", 8, 2000, 2, pp. 213-236, 227-228; M. Roberts, *The Jeweled Style: Poetry and Poetics in Late Antiquity*, Cornell University Press, Ithaca 1989.

—19. Agnellus *L.P.R.* 27.123-4, respectively *Liber Pontificalis* 54.10 (ed. and trans. R. Davis, *The Book of Pontiffs. The Ancient Biographies of the First Ninety Roman Bishops to A.D. 715*, Liverpool University Press, Liverpool 2010³ [1989]).

—20. S.K. Kostof, *The Orthodox Baptistry of Ravenna*, Yale University Press, New Haven-London 1965, p. 43. Fundamental for the study of the building remain Kostof; F.W. Deichmann, *Ravenna: Hauptstadt des spätantiken Abendlandes*, 6 Vols., Steiner, Wiesbaden 1958-1989; C. Muscolino et al. (eds.), *Il Battistero Neoniano. Uno sguardo attraverso il restauro*, Longo, Ravenna 2011.

—21. G. De Angelis d'Ossat, *Nuovi dati sulle volte costruite con vasi fittili*, "Palladio", 5, 1941, pp. 241-252, 249-251. "Si tratta di otto fori, trovati chiusi da stuccature più o meno vecchie, i quali sono posti in asse con gli otto finestroni ... Ciascun foro risulta formato dall'innesto di un tubo sui cerchi anulari ai quali è cementato con malta ed è disposto con lieve inclinazione verso il basso" (C. Capezzuoli, *Ravenna: Battistero di Neone - Indagini interessanti la struttura muraria dell'edificio*, "Le Arti", 2.5-6, 1940, pp. 41-59 quoted in C. Tedeschi, *La tecnica costruttiva della cupola e i materiali utilizzati*, in C. Muscolino et al. (eds.), *Il Battistero Neoniano*, see footnote 20, pp. 55-71, 56).

—22. Usually the scene was placed in the West in order to enact a principle of opposition between the West as the land of darkness and the East that of light cf. Cyril of Jerusalem *Myst. Cat.* 1.4. In the Neonian Baptistry the scene is on the NNW side, in accordance with the general orientation that places Christ, Peter, Paul, and the bishop's niche on the SE side.

—23. C. Tedeschi, *La tecnica costruttiva*, see footnote 21, p. 57.

—24. S.K. Kostof, *The Orthodox Baptistry*, see footnote 20, p. 33 n. 6.

—25. *L.P.* 34.23 (ed. R. Davis, see footnote 19).

—26. Constantine's donations recorded in the *L.P.* 34.18 include chandeliers with diameters of over 3 m.

—27. Chromatius of Aquileia *Tract. in Math.* 19.1.2 "Nam quia ipse sol iustitiae est, non immerito etiam discipulos suos lumen mundi cognominat; quia per ipsos, quasi per quosdam micantes radios, universo orbi cognitionis suae lumen infudit" (ed. and trans. G. Banterle, *Commento a Matteo*, Biblioteca Ambrosiana-Città Nuova Editrice, Milano-Roma 1990); cf. also Zeno of Verona *Tract.* 2.12.2.3, Maximus of Turin *Serm.* 29.1 and 62.2.

—28. I owe the remark to Prof. Lioba Theis. For the usual system see M.L. Fobelli, *Un tempio per Giustiniano: Santa Sofia di Costantinopoli e la Descrizione di Paolo Silenziario*, Viella, Roma 2005, figs. 125, 126, and 127.

—29. *L.P.* 48.5. A weight that appears the norm for the age, when, as noted by C. Pavolini, *L'illuminazione delle basiliche: il Liber Pontificalis e la cultura materiale*, "Mededelingen van het Nederlands Instituut te Rome", 60/61, 2003, pp. 115-134, 123 the lighting devices are generally smaller than in the previous century. Between Xystus III (*sed.* 432-440) and Simplicius (*sed.* 468-483) 66 crown lights, 6 candelabra, 48 candlestick chandeliers, 3 lanterns, 75 chandeliers, and 127 various lights of different sizes and material were donated by Popes to different buildings. See H. Geertman, *L'illuminazione della basilica paleocristiana secondo il Liber Pontificalis*, "Rivista di Archeologia Cristiana", 64, 1988, pp. 135-160. It should be stressed that half of the 50 years are represented by the rule of Leo I who remade, cf. *L.P.* 47.6 the silver services of the *tituli* taken by the Vandals. Leo I melted Constantinian water-jars amounting to 270 kg of silver, some of which might have been used also for illuminating devices for liturgical practice. No specific information on light devices is given, certainly due to the vast amount of information regarding the activity of this important Pope.

—30. *L.P.* 34.13.

—31. See the fonts at Kélibia (S. Ristow, *Frühchristliche Baptisterien*, Aschendorff, Münster 1998, nr. 727, p. 260 now in the Bardo Museum) and Sidi Jedidi (Ristow nr. 747, p. 264) where candles are depicted on the mosaic covering the interior of the font, indicating the position of the candlesticks.

—32. Cyril of Jerusalem *Myst. Cat.* 2.4. Zeno of Verona *Tract.* 1.23 and *Tract.* 1.32. Prudentius *Perist.* 12.43 and Paulinus of Nola *Carm.* 28.180-5 mention the interplay between the font and the ceiling's decoration.

—33. As Orlandini reported in 1937, the walls of the baptistry were pierced everywhere with transversal metal bars which, at that point, gravely affected the building's stability. Quoted without reference in C. Muscolino, *Restauri passati*, in C. Muscolino et al. (eds.), *Il Battistero Neoniano*, see footnote 20, pp. 89-104, 93.

—34. See the sermons of Maximus of Turin which exhibit a concentrated effort to identify Christ with the sun. The connection between this overlapping and a resilient local adoration of the sun was made by B. Ramsey, *The Sermons of St. Maximus of Turin*, Paulist Press, New York 1989, p. 327.