

DOI: 10.53737/6877.2023.77.55.038

O.V. Silina

**ORNAMENTAL CIRCLES ON THE SHROUDS OF THE FRESCOES  
IN THE CATHEDRAL OF THE NATIVITY OF THE VIRGIN, THE ST. FERAPONT  
MONASTERY: SACRAL SYMBOLS AND LITURGICAL PRACTICES VISUALIZED\***

This article describes the wall-painting cycle of ornamental circles on the hanging shrouds which decorate the Cathedral of the Nativity of the Virgin in the St. Ferapont Monastery. Painted in 1502 by the artel of Dionysius, the frescoes represent the earliest extant tier of shrouds among the works of Old Russian monumental art. The iconography and symbolism of hanging shrouds in the church space are well-known, but the reasons why the ornamental circles appeared on the shrouds as well as their semantics and the idea of a special solution Dionysius had made for the tier are among insufficiently studied issues. The background tonality behind the shrouds, the compositional and rhythmic arrangement and the number of circles are analyzed. By referring to iconographic parallels in Judaic ossuaries and Old Russian sarcophagi and church decorations, the conclusion is made that the ornamental circles had the most ancient origin and the peculiar sacral significance; the unique is the conceptual solution proposed by Dionysius: the symbolism of the Byzantine liturgical hours could be reflected in his interpretation of the shrouds.

**Key words:** the Cathedral of the Nativity of the Virgin, frescoes, Dionysius, hanging shrouds, circle with ornament, daily cycle of services, Byzantine hours.

**About the author:** Silina Ol'ga Vladimirovna, Museum of Dionisy's Frescoes, the Branch of Kirillo-Belozerski State Historical Architectural Art Museum-Reserve.

**Contact information:** 161120, Russia, Vologda Region, Kirillovsky District, Ferapontovo Vllage, Museum of Dionisy's Frescoes, the Branch of Kirillo-Belozerski State Historical Architectural Art Museum-Reserve, 8 Kargopolskaya St.; e-mail: silina.mfd@gmail.com.

О.В. Силина

**ОРНАМЕНТАЛЬНЫЕ КРУГИ НА ПОДВЕСНЫХ ПЕЛЕНАХ  
В СТЕНОПИСИ СОБОРА ФЕРАПОНТОВА МОНАСТЫРЯ:  
ВОЗМОЖНЫЙ ПРИМЕР ВИЗУАЛИЗАЦИИ САКРАЛЬНОГО СИМВОЛА  
И БОГОСЛУЖЕБНОЙ ПРАКТИКИ**

Рассмотрен цикл декоративных кругов, украшающих подвесные пелены на фресках в соборе Рождества Богородицы Ферапонтова монастыря. Стенопись выполнена артелью Дионисия в 1502 г., и пояс пелён является самым ранним полностью сохранившимся среди памятников древнерусского монументального искусства. Если иконография и символика изображения подвесных пелён в храмовом пространстве хорошо известны, то причины появления орнаментальных кругов на полотнищах, семантика и особое решение их яруса Дионисием изучены недостаточно. Анализируются тональность фона за пеленами, композиционно-ритмическое построение и количество декоративных кругов, проводятся иконографические параллели с декором иудейских оссуариев и древнерусских саркофагов, храмовым убранством. Сделан вывод о древнейшем происхождении орнаментальных кругов, имеющих сакральное значение, и об уникальном концептуальном решении Дионисия: в трактовке пелён могла найти отражение символика византийских богослужебных часов.

\* Статья поступила в номер 4 марта 2023 г.  
Принята к печати 19 марта 2023 г.

**Ключевые слова:** собор Рождества Богородицы, фрески, Дионисий, подвесные пелены, круг с орнаментом, круг суточных богослужений, византийские часы.

**Сведения об авторе:** Силина Ольга Владимировна, Музей фресок Дионисия, филиал Кирилло-Белозерского историко-архитектурного и художественного музея-заповедника.

**Контактная информация:** 161120, Россия, Вологодская обл., Кирилловский р-он, с. ФерAPONTOVO, ул. Каргопольская д. 8, Музей фресок Дионисия, филиал Кирилло-Белозерского историко-архитектурного и художественного музея-заповедника; e-mail: silina.mfd@gmail.com.

---

The Cathedral of the Nativity of the Virgin in the Ferapontov Monastery was painted by the artel of the Moscow artist Dionysius in 1502. The hanging shrouds located at the lower space level and decorated with ornamental circles are an important element of its frescoes. The shrouds with ornaments begin on the outer western wall, go round the foundations of the portal and continue in the interior along the perimeter of the cathedral framing the wall painting that expands from the dome space. In fact, the three-dimensional icon of the painting seems to rest on the shrouds, like a real icon on a covered lectern (Fig. 1). The tier is a horizontal white panel “suspended” on hinges and placed on black and grey backgrounds. The fabric is decorated with red and brown stripes above and below and ornamental circles are placed between them (their size is from 60 cm in the sanctuary — up to 75 cm in the naos; there were 52 circles, but one has been lost). Their patterns don’t repeat. The range of colours of the ornaments in the circles is simpler than in the rest of the painting. It consists of various combinations of black and grey (reft) with blue (azurite), yellow (ochre), pink (ochre), brown (iron-containing pigment), red (cinnabar) and green (glaucosite) pigments taken in pure form or with addition of white. The circles were painted in two stages: a lining layer was applied first and then modelling of shapes and detailing were made. The folds on the shrouds were painted from top to bottom, over the ornaments. In the scientific literature devoted to the frescoes in the Cathedral of the Nativity of the Virgin, the circles of the veils were considered as purely decorative elements of the painting of Dionysius. The more complete research was presented in the work of M.A. Orlova “Ornament in Monumental Painting of Ancient Russia” (Orlova 2004: 315—346). Technological features of the execution of the veils were described in the article written by E.N. Shelkova (Shelkova 2001: 182—196). However, the issues of semantics and arrangement of the circles need further study.

The appearance of images of hanging veils in the lower registers of wall painting has an ancient tradition and originates in the early Byzantine art (the churches of the Monasteries of Bawit in Egypt, the Church of Santa Maria Antiqua in Rome of the 6<sup>th</sup> century, and other monuments). It becomes generally accepted in the Middle Byzantine period (Lidov 2009: 301). In the Russian tradition, the technique of decorating veils with ornamented medallions was developed at the turn of the 14<sup>th</sup> — 15<sup>th</sup> centuries in the painting of monuments of the Novgorod and Moscow areas. The earliest example is the frescoes of Theophanes the Greek in the Church of the Transfiguration of the Saviour on Ilyina Street in Novgorod (1378). The next monument was the Assumption Cathedral on the Gorodok in Zvenigorod with the painting of about 1400 attributed to Andrei Rublev. It is known that the frieze of shrouds decorated with circles was also made in the Annunciation Cathedral of the Moscow Kremlin (the now lost painting of 1405 created by Theophanes the Greek and A. Rublev). The Assumption Cathedral of Vladimir also had a similar design of the lower tier of the painting (1408, Andrei Rublev and Daniil). The Cathedral of the Nativity of the Virgin of the Savvino-Storozhevsky Monastery (the beginning of the 15<sup>th</sup> century), the Cathedral of the Saviour of the Andronikov Monastery (painted by Andrei Rublev, the first third of the 15<sup>th</sup> century), the painting of the Church of the Nativity of the Virgin in Gorodnya in the first quarter of the 15<sup>th</sup> century — all of them had decorative friezes with circles running along the perimeter of all church compartments. Medallions in the Church of St. Sergius of Radonezh in the Novgorod Kremlin (painted in 1463) had a special decorative composition. The next (according to the time of its creation) monument in this group is the Cathedral of the Nativity of the Virgin in the Pafnutievo-Borovsky Monastery with

the earliest known painting of Dionysius dating back to the late 1460s — mid-1470s (Orlova 2004: 71—346). The frescoes of the above-mentioned churches have been partially preserved and today the tier of shrouds in the Cathedral of the Nativity of the Virgin in the Ferapontov Monastery is the only completely and authentically preserved one among the monuments of this period.

Symbolically, hanging fabrics depicted in the interior of Christian churches reminded of the Tabernacle and its outer curtain-fence. The fabrics were used in the decoration of the Tabernacle itself; their ornament probably consisted of flower rosettes which were later used in the carved decoration of the Temple of Solomon, as indicated in the Bible (1 Kings 6:18). Flower rosettes and dynamic, rotating circles are found on the ossuaries of the 1<sup>st</sup> — 2<sup>nd</sup> centuries, similar to the ossuary of Caiaphas (Fig. 2). Like ossuaries, ancient Russian sarcophagi were decorated with decorative circles: a slate one of the 11<sup>th</sup> — 12<sup>th</sup> centuries from the Church of the Tithes in Kiev, previously regarded as the so-called sarcophagus of St. Princess Olga (the National Reserve “Sofia of Kiev”) (Fig. 3) and a wooden one discovered by M.A. Sagaydak on Podol (Sagajdak 1991: 99, Fig. 55). In the early Byzantine period, the image of the Tabernacle tent was reflected in the mosaic decoration of the cross vaults of the narthex of Hagia Sofia in Constantinople (Lidov 2009: 302—303). Marble altar barriers of Byzantine churches were decorated with carving consisting of static and dynamic circles. A similar decor was on the slate slabs-fences of the choir in the first churches of Kievan Rus. For example, the relief plates of the choir of the Transfiguration Cathedral in Chernigov (the 1030s) and the Cathedral of St. Sophia in Kiev (the 11<sup>th</sup> century) have been preserved (Arhipova 2007: 591—596) (Figs. 4—5). Both the plates of the fences and the shrouds were placed near the floor and their decor included a variety of ornamental circles-rosettes, sometimes interwoven with ribbon ornaments. It follows therefrom that dynamic and static ornaments in the circles indicate the sacred symbolism of objects (things, spaces) and as such, they are their oldest markers. They can be apparently called signs denoting the presence of God and his energies.

Researcher of the frescoes in Ferapontovo M.A. Orlova made two interesting observations, the first of which concerned the leveling by Dionysius, using the “folds” of the shrouds, the southwest and northwest corners of the cathedral (the author did not give an explanation for this). In the second case, inside the tier, the researcher identified three different groups of the shrouds, which was explained by the work of different artists (Orlova 2004: 324). The reasons for similarity and the sequence of arrangement of the circles were not revealed. Indeed, the hanging panels in the corners of the church seem to overlap each other, rounding with folds and breaking the decor. The same thing happens on the protruding corners of the door slopes (Figs. 6—7). “Draping” the corners and slopes with folds, the artist seemed to try to hide them, making the lower tier of the painting (the space where the worshippers stay) without clear boundaries, or more exactly - boundless. It is the peculiarity of only spherical space, the illusion of which can be created besides the dome structure with a circular plan similar to the Roman Pantheon (the 2<sup>nd</sup> century), the Rotunda of St. George in Thessaloniki (306) or the Church of the Holy Sepulchre (326). St. Basil the Great testifies in Homilies of the Hexameron: “In the circle, our feeling, at first glance, cannot notice the beginning... the circle runs away from our sense, and we cannot find where it began and where it ended...” (Vasilij Velikij). Thus, the circular plan is a kind of projection of the dome hemisphere onto the plane or, in the symbolic sense, “heaven” onto “earth”, which corresponds to the concept of the Christian church as “Heaven on Earth” (Fig. 8).

The assumption of M.A. Orlova that the tier was painted by different people is quite acceptable, but if it was done, it was clearly not to make the groups of shrouds different. It would not be difficult to make the circles similar because the frescoes of the cathedral (a much more difficult task) were painted stylistically smoothly, to say nothing of the colour<sup>1</sup>. Accordingly, the difference in the shroud circles is a conscious decision of Dionysius. Now it is difficult to judge the

---

<sup>1</sup> Beside Dionysius, his sons Feodosy and Vladimir and masters of his artel participated in the decoration of the cathedral with frescoes.

thoroughness of execution and the colour intensity of the sanctuary and credence circles, since their state of preservation is much worse than in the naos.

If you focus on the tone of the background behind the white panels, then the shrouds of the cathedral should be divided not into three groups, but into two: grey blue backgrounds and circles — the southern half of the church and black backgrounds and circles — the northern one (Fig. 9). It should be noted that according to the monastic Inventories, the southern and northern cathedral doors were called “noon” and “midnight”: “В тое ж соборную церковь и с паперти ж *от полуденные стороны вход* <...> Подле тех *дверей полуденных* образ Пресвятыя Богородицы Одигитрия” (GAVO. F. 496. Op. 1. D. 1663. L. 59) (my italics — O.S.). Similarly, the interior of the church was also divided into the noon (light, southern) and midnight (dark, northern) halves. This division was continued in the sanctuary of the cathedral that proves the difference in the background behind the shrouds: it was black on the left and grey — on the right (Figs. 10—11). It is noteworthy that this division was emphasized by the throne and the footstool of the Virgin, made on the contrast of light and shadow (Fig. 12). The side north apse referred to the midnight (Prothesis) half and the south apse — to the noon (the Side-Chapel of St. Nicholas) half (Figs. 13—14).

It is known that the liturgical hours in medieval Russia, in accordance with the Byzantine ones, were divided into day and night (Simonov 2004: 320—325) (Fig. 15). Astrological texts, considering the influence of planets on the hours and days of the week, were also popular. For example, one of such texts was the treatise “According to this, the hours are implied as day and night”, which was a part of the handwritten “The Book of Psalms” of the turn of the 15<sup>th</sup> — 16<sup>th</sup> centuries (RSL. F. 354. No. 14. P. 663) (Simonov 2015: 93). When the cathedral space is perceived along the east-west axis from the sanctuary (the sanctuary is the main sacred center of the church space), the cycle of daily services according to the Byzantine clock will coincide with the first and second groups of the shrouds, with noon (12.00) falling on the southern doors (noon), and midnight (00.00) on the northern (midnight). Each individual ornamental circle, in our opinion, could symbolize a week, whereas 52 circles-weeks taken together formed a full liturgical year. The number of circles was not chosen by chance: a larger or smaller radius directly affected their total number. Furthermore, the distances between the circles varied and it indicates the conscious decision of the masters to fit the necessary number of ornaments into the tier of shrouds. Thus the daily, weekly and annual liturgical cycles were probably conveyed through the symbolism of ornamental veils in the cathedral.

The relevance of the issue of liturgical time is evidenced by a number of details in the interior of the cathedral: there are numerous graffiti of the 16<sup>th</sup> — 19<sup>th</sup> centuries in the upper part of the veil on the northern side of the north-eastern pillar, located behind the iconostasis. Among them there are drawings, calendar dates and names of sacristans (Fig. 16). Sacristans occupied the place behind the northern pillar during the services, when they did not perform liturgical duties<sup>2</sup>. A group of signs placed among the inscriptions is of interest within the framework of this research. Basically, these are images of the circles divided into segments with lines drawn through the center (Fig. 17). In the first drawing, evenly drawn lines divide the circle into 24 parts. Next to it there is its less successful counterpart, in which the same 12 lines of different length tend to intersect, but do not intersect at one point. The number of segments formed from the intersection suggests a parallel with the hour daily circle, or rather with the scheme of the Byzantine liturgical hours, which the sacristan could use during services. It is curious that the image of a similar, but divided into 12 segments (2 hours each) circle in a similar place — on the shroud of the northern side of the northeastern pillar — is on the frescoes of 1564 in the Transfiguration Cathedral in Yaroslavl (Figs. 18—19). The presence of a scheme resembling the liturgical hours in the same places of both churches may indicate the existence of a peculiar tradition. If this is the case, then this observation has a connection with the hanging shrouds in Ferapontovo and also shows the direct image of this particular scheme in the

---

<sup>2</sup> Graffiti reveal the following: on the opposite side of the credence there is one more graffiti specifying that it was a “понома(р)ское мѣсто”. Now compartments located near the sacristan’s doors in the church credence are the places where sacristans usually stand during the service.

church space both in the Transfiguration Cathedral and in the graffiti version of the Nativity of the Virgin Cathedral. The very fact of visualization of the Byzantine liturgical hours already admits the possibility of existence of both earlier images of them and other conceptual solutions, similar to the shrouds of Dionysius in the Cathedral of the Nativity of the Virgin.

Let's take a closer look at the ornamental circles. If this cycle really symbolizes the liturgical hours, then the ornaments should also move like a clock that is going. All the circles of the cathedral can be divided into static (Fig. 20), called due to the compositional solution, but not tonal and colouristic, often creating the effect of "vibration" and "radiance" (they are beyond the scope of our study); dynamic or rotating ones (Fig. 21); and circles resembling funnels: only their periphery "moves" and the stationary center seems to draw it into itself (Fig. 22). In this sense, the latter resemble whirlpools or galaxies.

Let's consider the circles starting the movement from the first group of the veils to the second: from the Side-chapel of St. Nicholas to the southern and then the western doors. The first circle of the chapel (the beginning of the first group) rotates counterclockwise (Fig. 23), the next one after it rotates clockwise. This movement is picked up by another rotating circle located to the right of the south door (Fig. 24) and a disk partially "hidden" by drapery in the southwest corner of the cathedral. Further, two circles are placed on the western wall, the movement in which continues clockwise (Fig. 25). Moving along the western wall, we turn to the second group. In the north-western corner of the cathedral, there are two circles spinning clockwise, the left one is partially hidden behind the "folds" (Fig. 26). They are echoed by the sign on the north wall (Fig. 27), where, due to the complexity of the drawing, the ornament failed. In the credence to the left of the window, there is a disk rotating clockwise (Fig. 28), and there is a circle "funnel" at the passage from the credence to the sanctuary.

The circles in the sanctuary differ from the others; they are of different size because the synthronon was located in the apse. On the north side there are two disks rotating clockwise (Fig. 29). The disk located to the right of the window picks up the movement (Fig. 30). It is noteworthy that under the window, above the synthronon, there is a static circle, the basis of its ornament is a cross (Fig. 31). In front of the passage from the sanctuary to the sacristy (the Side-chapel of St. Nicholas), there is a circle "funnel", and under the figure of Metropolitan Peter there is a circle with the clockwise rotation of elements. On the plan of the cathedral, where the layout of static and dynamic circles is presented, we can see that rotating disks are arranged evenly in the church and they set out the direction of clockwise movement of the entire cycle in circle (Fig. 32), which corresponds to the movement of time according to the Byzantine liturgical hours.

We can see in the plan-scheme discussed above that the Side-chapel of St. Nicholas remains uncovered with the general movement; it lacks any decoration of the shrouds in the sanctuary area. There could be several reasons for this. Exceedance of the number of circles would violate the symbolism of the annual circle of services consisting of 52 weeks. However, if the artists had a task to introduce ornaments into the southern apse (the Side-chapel of St. Nicholas) preserving their total number, they could increase the distances between the disks, but as we see, there was not such a task. In terms of technology, the shrouds of the side-chapel were painted quickly, the masters did not have time to smooth out and compact the priming (levkas) laid on the wall: the painter who created the folds of the shrouds followed them and sometimes was ahead of them. In some areas of the chalk ground, you can see some traces of his brush with long hairs that more than once stuck in the loose prime coat (Fig. 33). During Dionysius' work, the second, inner iconostasis (partially blocked by the main iconostasis) was located in the depths of the Side-chapel of St. Nicholas, dividing the cramped space of the chapel into two parts. Behind the iconostasis there was an altar covering a significant part of the shrouds. If we take into account that the services in the cathedral were held only in the warm season and the Side-chapel of St. Nicholas was used rarely, then the moment of inexpediency of the decoration of the lower level of the painting probably played a decisive role in this case.

It is noteworthy that the rotating ornaments of the Side-chapel of St. Nicholas located next to the entrance move in opposite directions from each other: the first circle towards the side chapel, the second to the naos. A similar and seemingly counter movement of the circles (united with a common clockwise direction) can be seen in the altar apse on the sides of the altar pillars: the southern side of the north-eastern pillar — the movement of the disk goes to the sanctuary, the northern side of the south-eastern pillar — the movement goes to the naos (Figs. 34—35) It is most likely the way how the ornaments “responded” to the liturgical actions of the priest and his walking from the Royal Doors into the church space and back, small and great Entrances, the carrying-out of the Gospel, and so on. An indirect proof of such a hypothesis is the following visual example: in the exterior fresco of the western portal created simultaneously with the painting of the cathedral, the Archangel Gabriel is depicted to the right of the main doors. He is marching with a scroll towards the entrance, as if leading everyone who approaches the church (Fig. 36). The circle on the shroud located under him rotates in a similar direction, and under the image of the Archangel Michael presented frontally (to the left of the doors), the ornamental circle is static (Fig. 37). It is noteworthy that the original colour of the circles and backgrounds behind the veils of the archangels was also different: black on the left and grey on the right. Accordingly, the symbolism of the daily circle of divine services with its division into night and day services was already reflected in the portal shrouds. It indicates the single conceptual solution of the lower tier of the painting in the Nativity of the Virgin Cathedral.

The circles of the “funnel” are of particular interest in the cycle (Fig. 38). The first is located on the western side of the north-western pillar (to the left of the main entrance), the second in the passage from the sanctuary to the credence, the third in front of the passage from the sanctuary to the Side-chapel of St. Nicholas, which was later blocked with a thin wooden wall. The regularity of the arrangement of such disks is that they are placed on the borders of church spaces: from the western compartment to the naos, from the sanctuary to the credence and the Side-chapel of St. Nicholas.

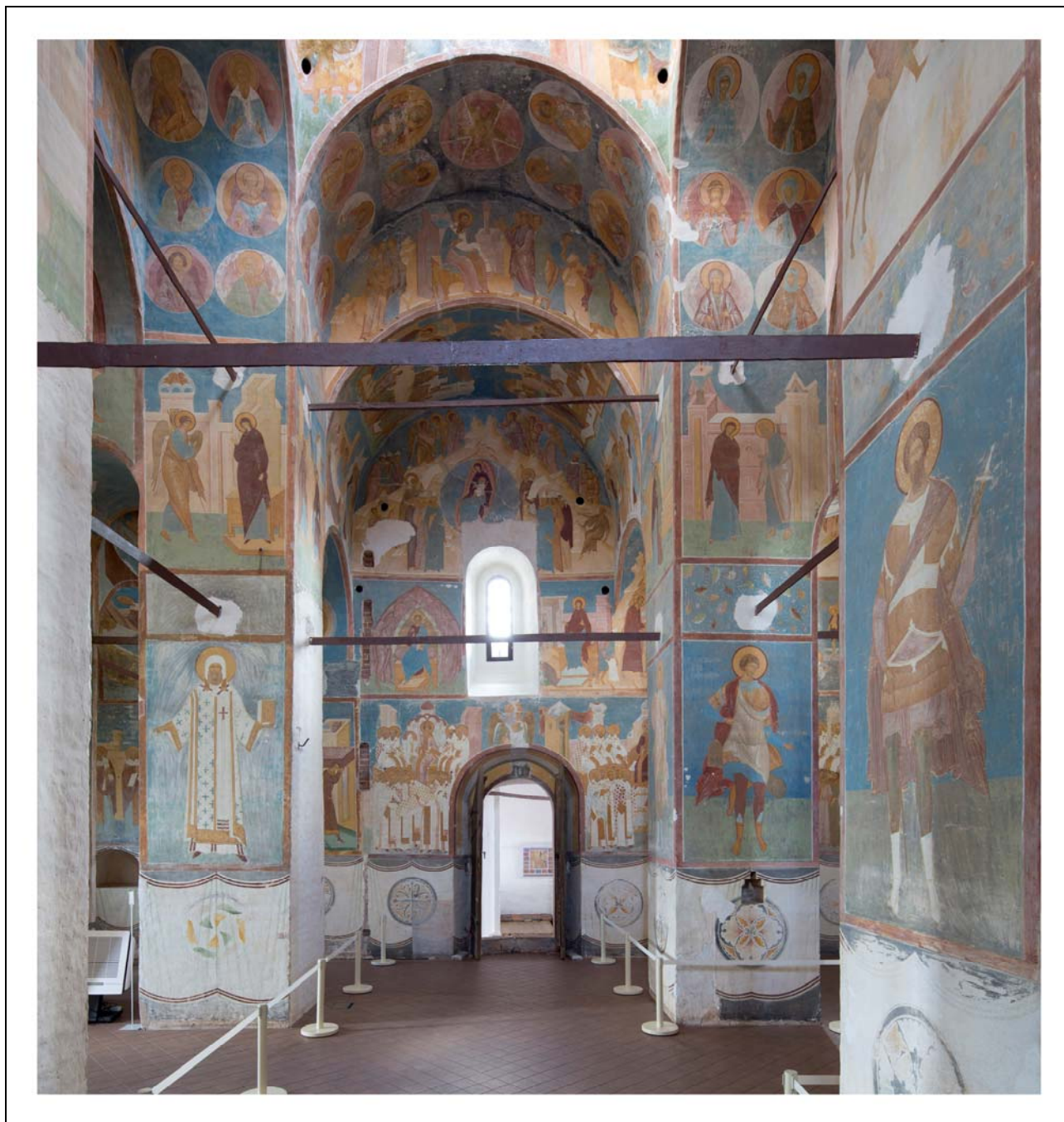
Now it is difficult to say whether there was a similar to the Nativity of the Virgin Cathedral concept of the arrangement of circles on the shrouds in other monuments or whether they performed a purely decorative function. It can be assumed that, in the previous, earlier projects of Dionysius, that included not only the above-mentioned murals of the Pafnutievo-Borovsky Monastery, but also the frescoes of the Iosifo-Volokolamsk (1485) and the Chigasov (the 1490s) Monasteries, this idea was either already used or was just being formed. In the preserved monuments of monumental painting of the 16<sup>th</sup> and 17<sup>th</sup> centuries, the ornaments of the veils have a purely decorative function (cathedrals of the Moscow Kremlin, Rostov and Yaroslavl lands and others).

Thus, the uniqueness of the tier of shrouds of the Cathedral of the Nativity of the Virgin in the Ferapontov Monastery consists not only in its originality, but also in the fact that Dionysius depicting simple iconic forms stepped beyond the bounds of ornamentation and used a circle as the basis of spatial composition (bringing to a circular plan, the closed cycle). Tonally and rhythmically (directing the movement of the circles clockwise), the artist interpreted the ornamental circles on the shrouds as a symbol of the Byzantine clock, thereby combining the space of the cathedral with the services of the daily circle.

The considered example of the tier ornament gives a completely new picture of the perception of the church space: not monumental and static, but as if rotating clockwise. This movement is echoed by the cycles of painting placed above: “Ecumenical Councils”, “The Great Akathist of the Mother of God”, the frescoes of the lunettes, the arches and the drum with semi-figures of saints in the coloured circles of glory. Such perception corresponded to the Byzantine concept (Lidov 2011: 35), where space was perceived as mobile environment in circular motion, and the Epiphany was presented as an everlasting process that has neither beginning nor end.

## References

- Arhipova, E.I. 2007. Arhitekturnyy dekor i monumentalnaya plastika Kievskoy Rusi. Konec X — nachalo XII veka (Architectural Decor and Monumental Plastic Arts of Kievan Rus. Late 10<sup>th</sup> — early 12<sup>th</sup> centuries). In: Komech, A.I. (ed). *Istoriya russkogo iskusstva. Iskusstvo Kiyevskoy Rusi. IX – pervaya chetvert' XII veka (History of Russian Art. Art of Kievan Rus. 9<sup>th</sup> — first quarter of the 12<sup>th</sup> centuries)*. Vol. 1. Moscow: Severnyi palomnik, 570—617 (in Russian).
- Vasiliy Velikiy. Besedy na Shestodnev. Beseda 1 (Homilies of the Hexameron. Homily 1). Available at: [https://azbyka.ru/otechnik/Vasilij\\_Velikij/besedy\\_na\\_shestodnev/](https://azbyka.ru/otechnik/Vasilij_Velikij/besedy_na_shestodnev/) (accessed 03.02.2023).
- GAVO. F. 496. Op. 1. D. 1663. L. 59. Knigi opisnye Ferapontova monastyrya belozerskogo igumena Feofana z bratieyu noyabrya dnya 1747 goda.
- Orlova, M.A. 2004. *Ornament v monumental'noy zhivopisi Drevney Rusi. Konec XIII — nachalo XVI v. (Ornament in Monumental Painting of Ancient Russia. Late 13<sup>th</sup> — early 16<sup>th</sup> centuries)*. Moscow: Severnyi palomnik (in Russian).
- ramiyudovin.com: 1: Ossuary of Caiaphas. Available at: <https://ramiyudovin.com/kaifa/> (accessed 03.02.2023).
- Lidov, A.M. 2009. *Ierotopiya. Prostranstvennyye ikony i obrazy-paradigmy v vizantiyskoy kul'ture (Hierotopy. Three-Dimensional Icons and Images-Paradigms in the Byzantine Culture)*. Moscow: Feoriya (in Russian).
- Lidov, A.M. 2011. Vrashhayushhiysya hram. Ikonicheskoe kak performativnoe (Rotating Church. Iconic as Performative). In: Lidov, A.M. (ed). *Prostranstvennyye ikony. Preformativnoye v Vizantii i Drevney Rusi (Three-Dimensional Icons. Performative Byzantium and Ancient Rus)*. Moscow: Indrik, 27—51 (in Russian).
- Sagaydak, M.A. 1991. *Davn'okyyivs'kyy Podi: Problemy topografii, stratyografiyi, khronolohiyi (Ancient Kyiv Podi: Problems of topography, stratigraphy, chronology)*. Kyiv: Naukova dumka.
- Simonov, R.A. 2004. Kalendarnoe vremya v drevnerusskoy kosmologii (Calendar Time in Old Russian Cosmology). In: Barankova, G.S. (ed). *Drevnerusskaya kosmologiya (Old Russian Cosmology)*. Saint Petersburg: Aletyya, 320—325 (in Russian).
- Simonov, R.A. 2015. Kak mogla vzniknut' neptolemeevskaya traktovka “upravleniya” vremenem, predstavlenaya v slavyano-russkikh tekstah (How Non-Ptolemaic Interpretation of Time “Management” presented in the Slavonic and Russian Texts Could Emerge). In: Konyavskaya, E.L. (ed). *Pravoslavnaya Rus'. Voprosy mediyevistiki (Old Russia. The Questions of Middle Ages)*. No. 4 (62). Moscow: Indrik, 93—96 (in Russian).
- Shelkova, E.N. 2001. Tehnologiya stenopisi Dionisiya (poyas poloteneg) (Technology of Dionysius' Wall painting (the Tier of Shrouds)). In: Kononov, F.Ya. (ed). *Kirillov. Istoriko-krayevedcheskiy al'manakh (Kirillov. Historical and local history almanac)*. IV. Vologda: Rus, 182—196 (in Russian).



**Fig. 1. Interior of the Nativity of the Virgin Cathedral in the Ferapontov Monastery. Frescoes of 1502, Dionysius and his workshop. Photo by I. Khobotov.**





**Fig. 2. Ossuary of Caiaphas. 1<sup>st</sup> century. Judaea (after ramiyudovin.com: 1).**



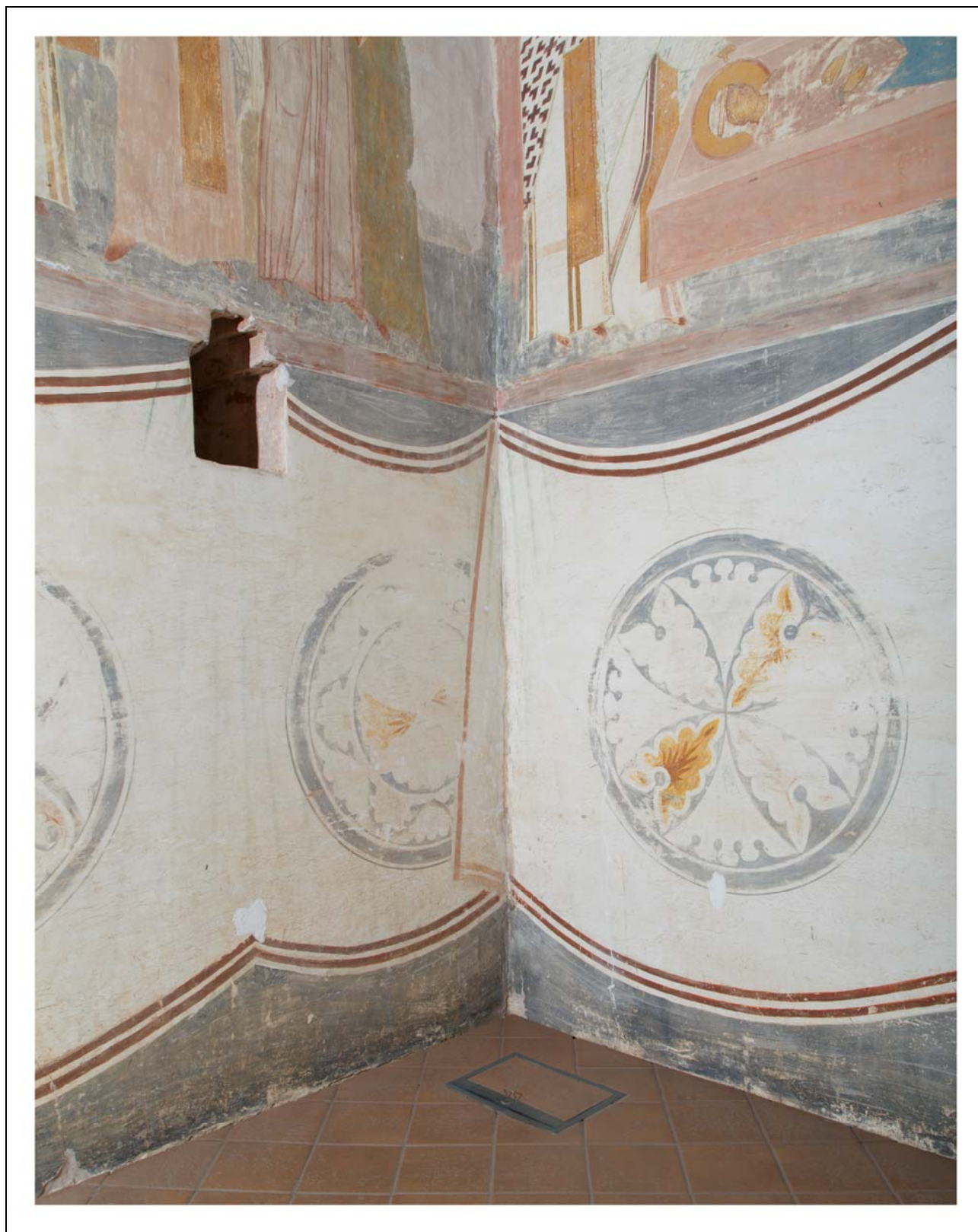
**Fig. 3. Sarcophagus. 11<sup>th</sup> — 12<sup>th</sup> century. Tithe Church in Kiev. (the National Reserve “Sofia of Kiev”)  
(after Arhipova 2007: 616, Fig. 653).**



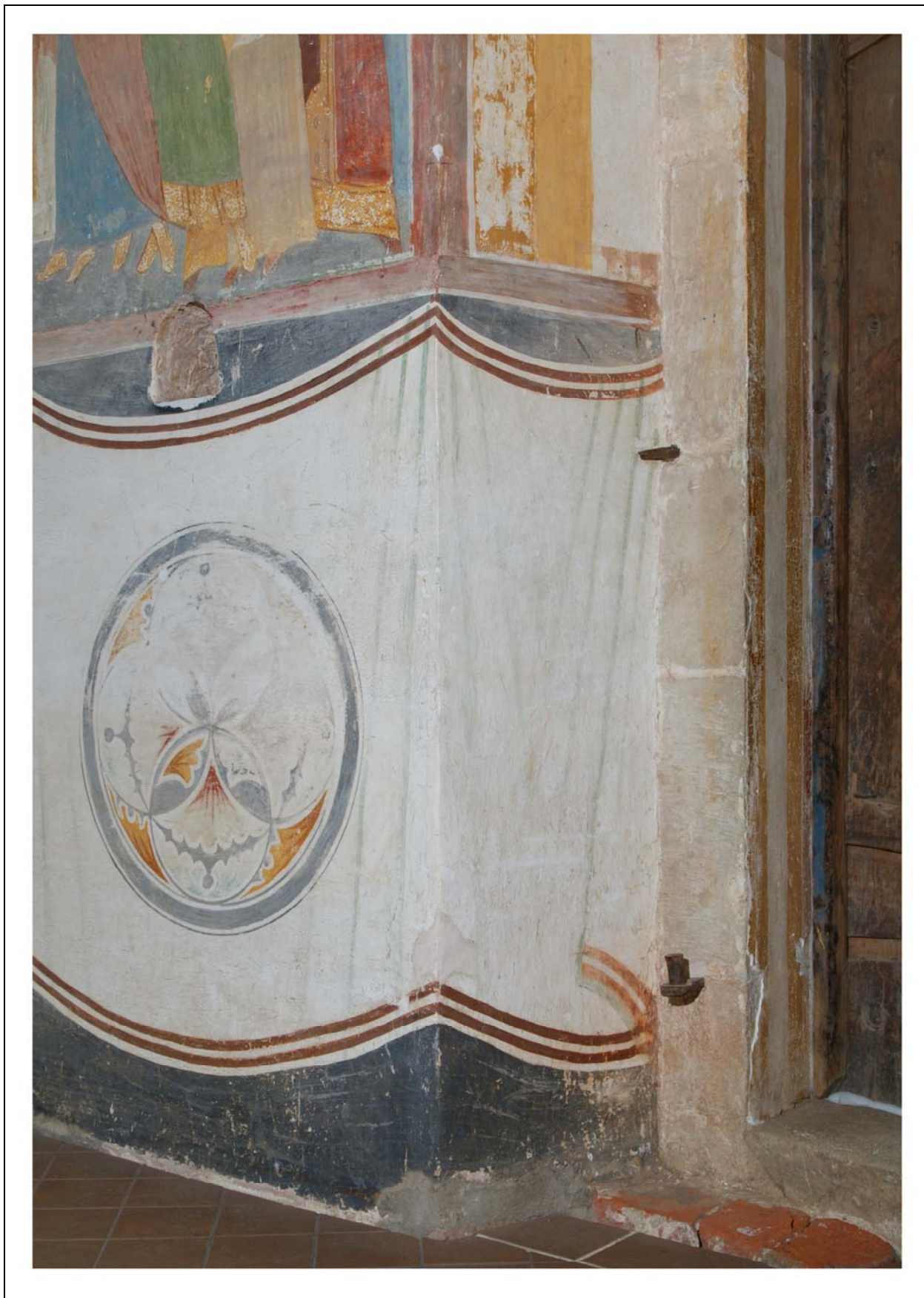
**Fig. 4.** Parapets of the choir balconies from the Cathedral in Chernigov. 11<sup>th</sup> century (after Arhipova 2007: 591, Fig. 619).



**Fig. 5.** Parapets of the choir balconies from the Saint Sophia Cathedral in Kiev. 11<sup>th</sup> century (after Arhipova 2007: 596, Fig. 628).



**Fig. 6.** Leveling the corners with “folds” in the Nativity of the Virgin Cathedral in the Ferapontov Monastery. Photo by I. Khobotov.



**Fig. 7. Leveling with “folds” of the door slopes in the Nativity of the Virgin Cathedral in the Ferapontov Monastery. Photo by I. Khobotov.**

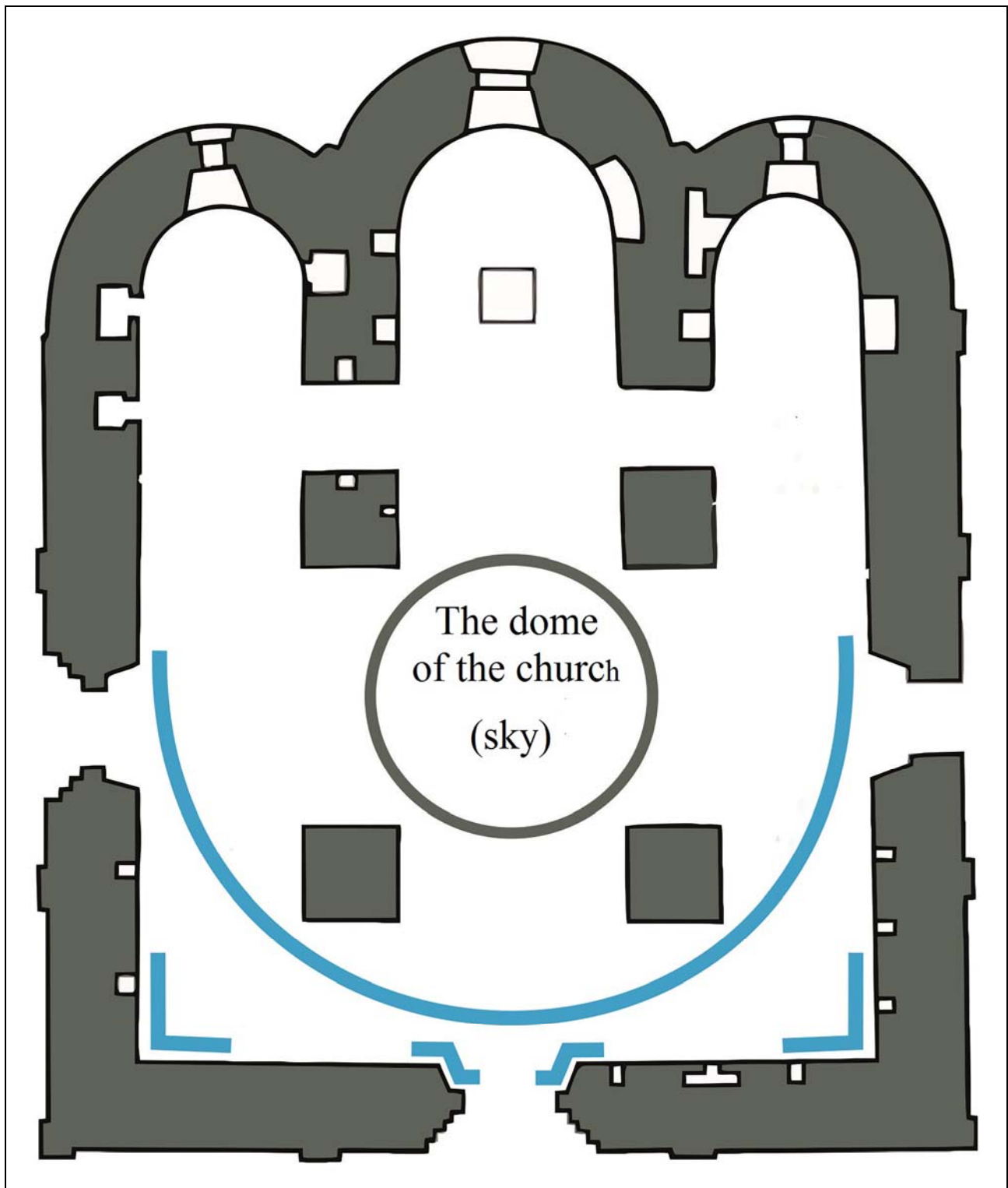
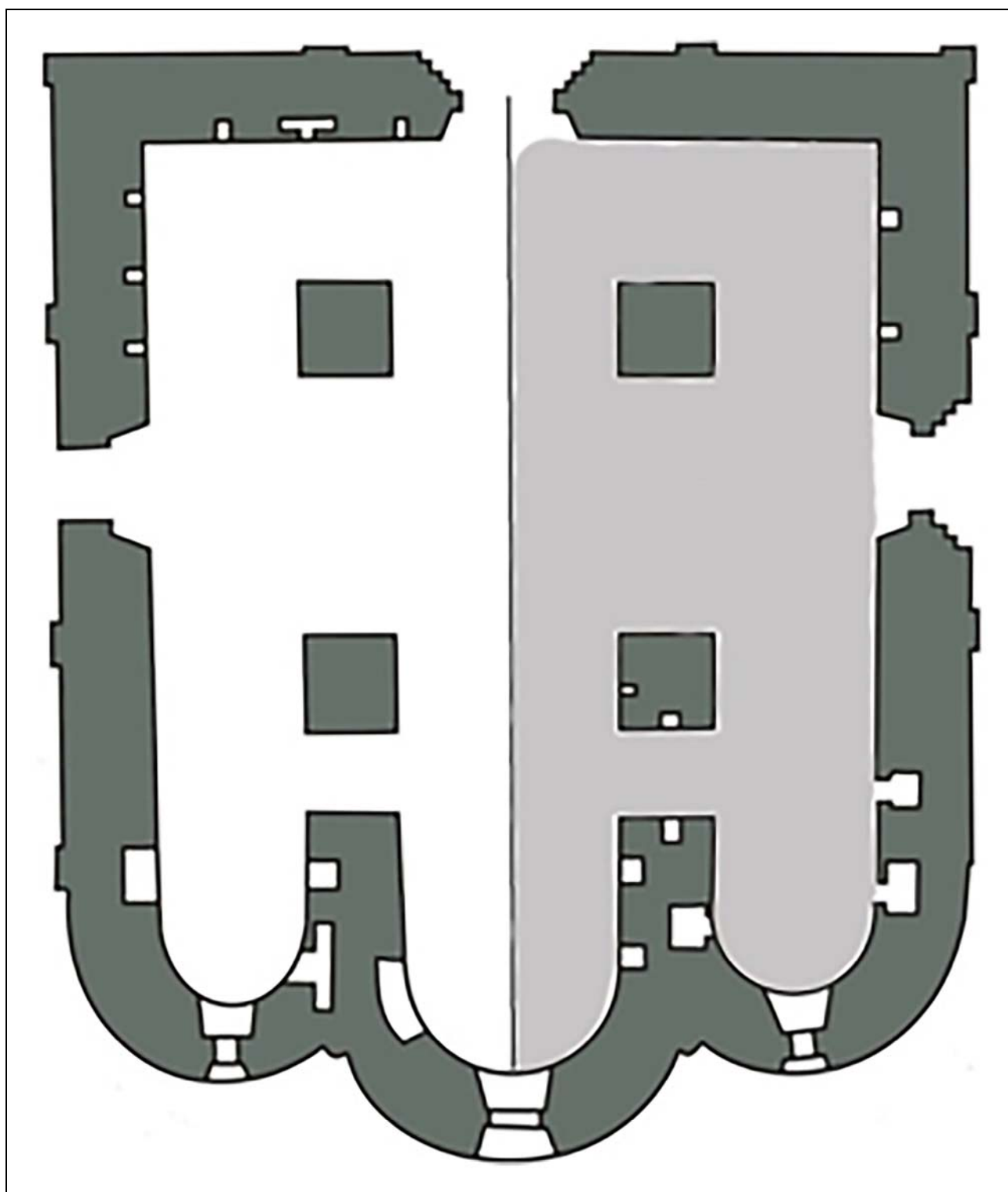


Fig. 8. Scheme: round plan — “Heaven on Earth”. Drawing by the author.



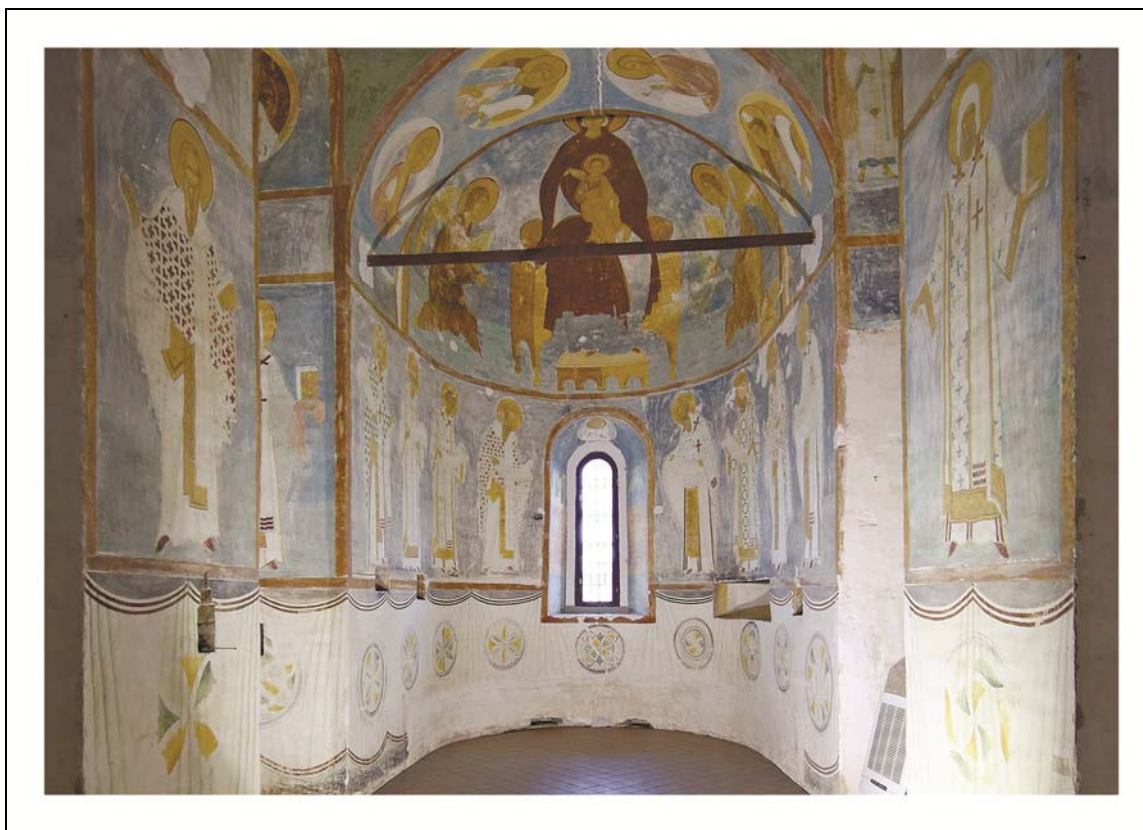
**Fig. 9.** Scheme of the space division of the Nativity of the Virgin Cathedral into “night” and “day” zones. Drawing by the author.



**Fig. 10.** Grey background colour behind the shrouds on the south wall of the altar apse. The Nativity of the Virgin Cathedral in the Ferapontov Monastery. Photo by I. Khobotov.



**Fig. 11.** Black background colour behind the shrouds on the north wall of the altar apse. The Nativity of the Virgin Cathedral in the Ferapontov Monastery. Photo by I. Khobotov.

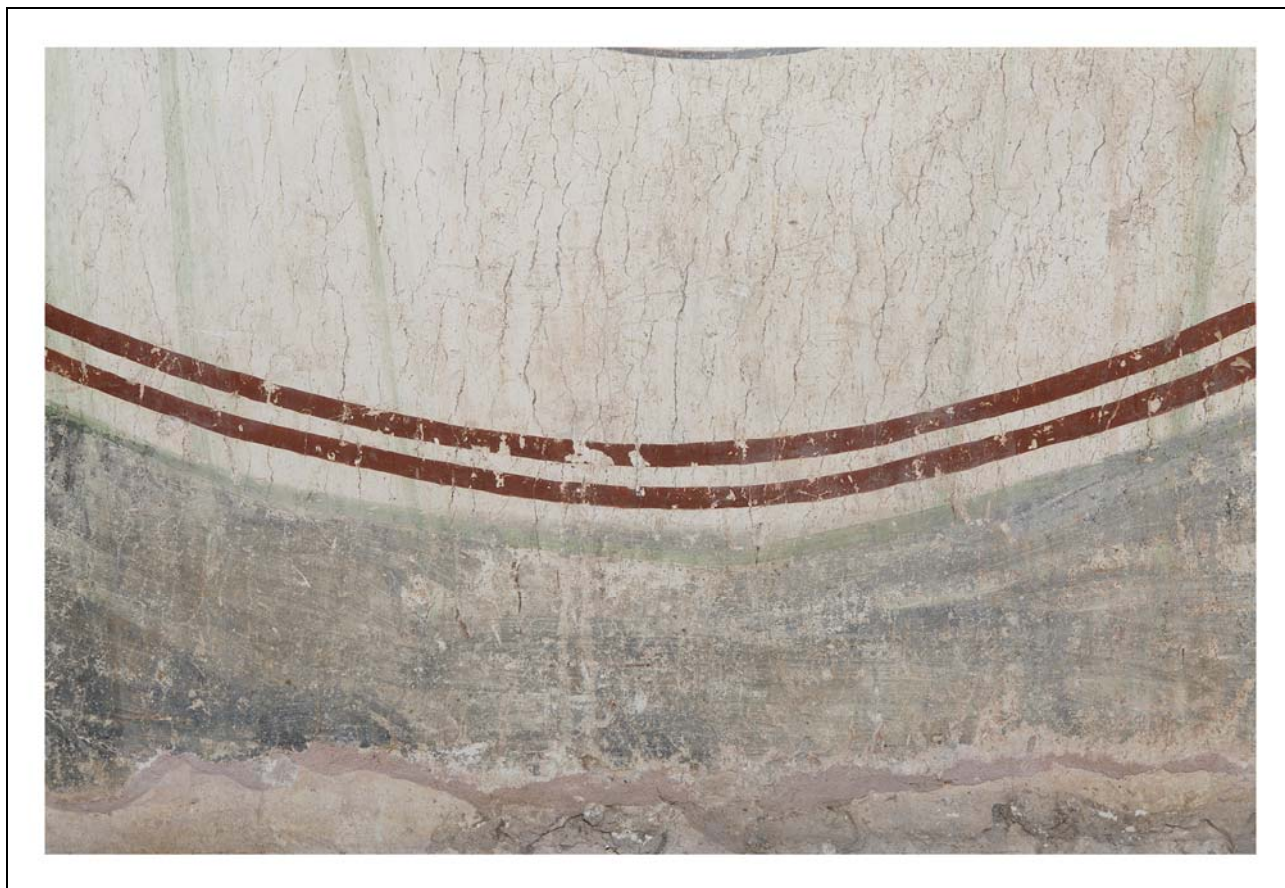


**Fig. 12. Frescoes of the altar apse. The Nativity of the Virgin Cathedral in the Ferapontov Monastery.** Photo by I. Khobotov.



**Fig. 13. Black background colour behind the shrouds in the north apse. The Nativity of the Virgin Cathedral in the Ferapontov Monastery.** Photo by I. Khobotov.





**Fig. 14.** Gray background color behind the shrouds in the south apse. The Nativity of the Virgin Cathedral in the Ferapontov Monastery. Photo by I. Khobotov.

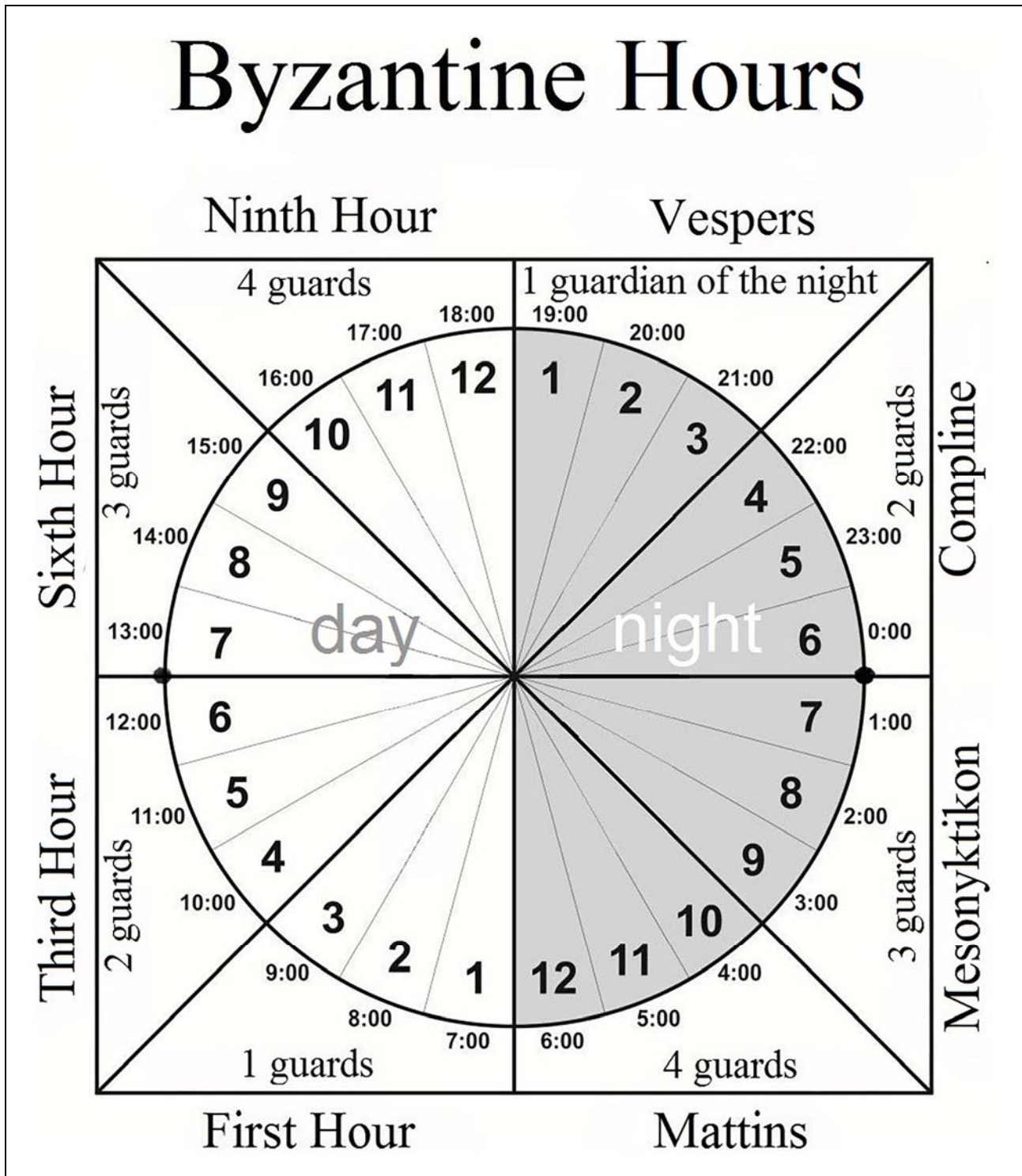


Fig. 15. Scheme of the circle of daily services (Byzantine hours). Drawing by the author.



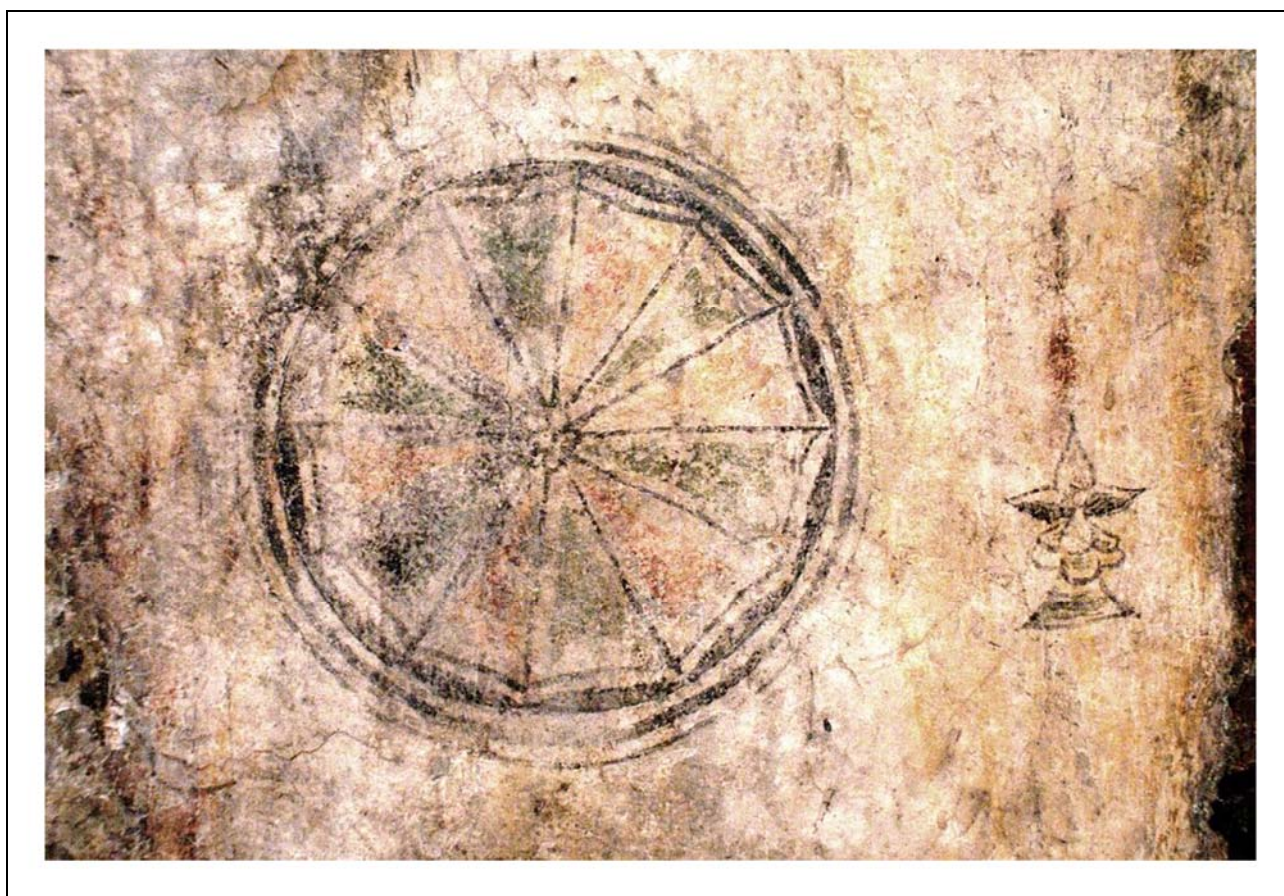
**Fig. 16. Graffiti in the upper part of the tier of shrouds of the north-eastern pillar. The Nativity of the Virgin Cathedral in the Ferapontov Monastery. Photo by the author.**



**Fig. 17. Graffiti circles divided into 24 segments. The Nativity of the Virgin Cathedral in the Ferapontov Monastery. Photo by I. Khobotov.**



**Fig. 18.** The image of a circle divided into segments in the upper part of the tier of shrouds of the north-eastern pillar. Fresco of 1564. Transfiguration Cathedral, Yaroslavl. Photo by the author.



**Fig. 19.** The image of a circle divided into segments in the upper part of the tier of shrouds of the north-eastern pillar. Fresco of 1564. Transfiguration Cathedral, Yaroslavl. Detail. Photo by the author.



**Fig. 20. Static circle. Fresco of 1502. The Nativity of the Virgin Cathedral in the Ferapontov Monastery. Photo by I. Khobotov.**



**Fig. 21. Dynamic circle. Fresco of 1502. The Nativity of the Virgin Cathedral in the Ferapontov Monastery. Photo by I. Khobotov.**



**Fig. 22. Circle "Funnel". Fresco of 1502. The Nativity of the Virgin Cathedral in the Ferapontov Monastery. Photo by I. Khobotov.**





**Fig. 23. Side-chapel of St. Nicholas, south wall. Multidirectional movement of dynamic circles. The Nativity of the Virgin Cathedral in the Ferapontov Monastery. Photo by I. Khobotov.**



**Fig. 24. South wall, dynamic circles, clockwise movement. The Nativity of the Virgin Cathedral in the Ferapontov Monastery. Photo by I. Khobotov.**



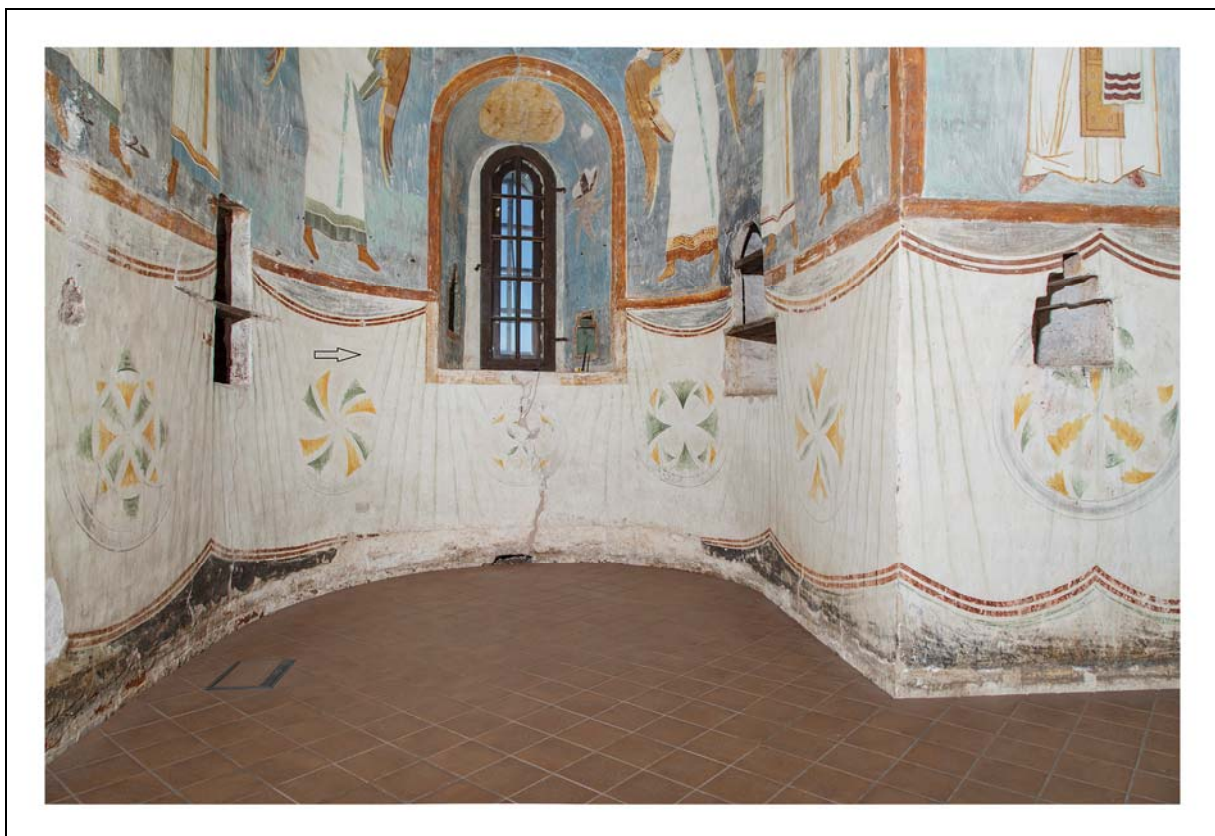
**Fig. 25. Western wall, dynamic circles, clockwise movement. The Nativity of the Virgin Cathedral in the Ferapontov Monastery. Photo by I. Khobotov.**



**Fig. 26. Circles in the northwest corner. Clockwise movement. The Nativity of the Virgin Cathedral in the Ferapontov Monastery. Photo by I. Khobotov.**



**Fig. 27. Northern wall. View from the Credence of the Nativity of the Virgin Cathedral in the Ferapontov Monastery. Photo by I. Khobotov.**



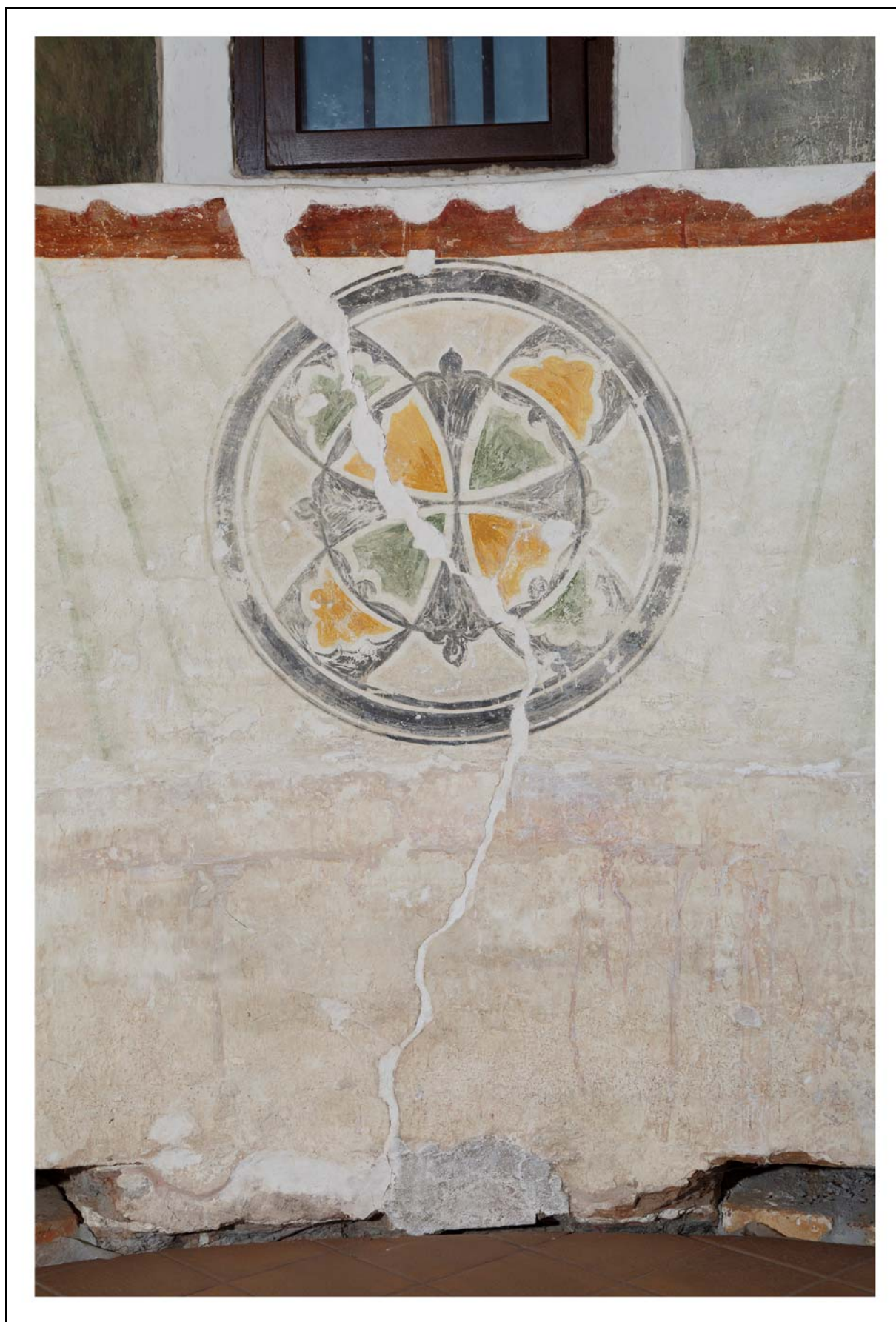
**Fig. 28. Credence. The Nativity of the Virgin Cathedral in the Ferapontov Monastery. Photo by I. Khobotov.**



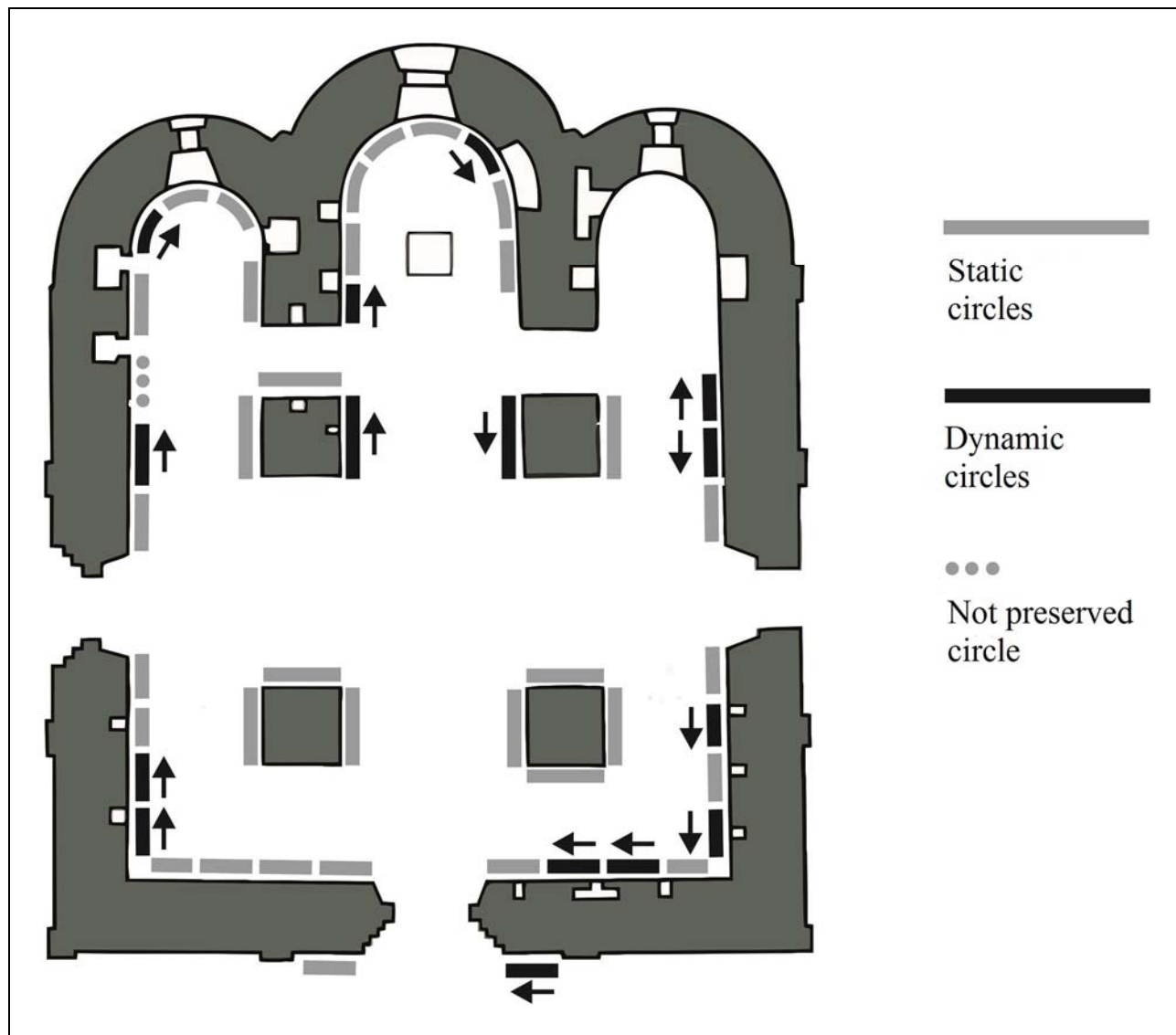
**Fig. 29.** Altar apse. Northern wall. The Nativity of the Virgin Cathedral in the Ferapontov Monastery.  
Photo by I. Khobotov.



**Fig. 30.** Altar apse. Southern wall. The Nativity of the Virgin Cathedral in the Ferapontov Monastery.  
Photo by I. Khobotov.



**Fig. 31. Circle above the synthronos.** Photo by I. Khobotov.



**Fig. 32. Scheme of dynamic circles defining clockwise movement in the space of the cathedral.** Drawing by the author.



**Fig. 33.** Dynamic circle on the north altar pillar. Photo by I. Khobotov.



Fig. 34. Dynamic circle on the southern altar pillar. Photo by I. Khobotov.

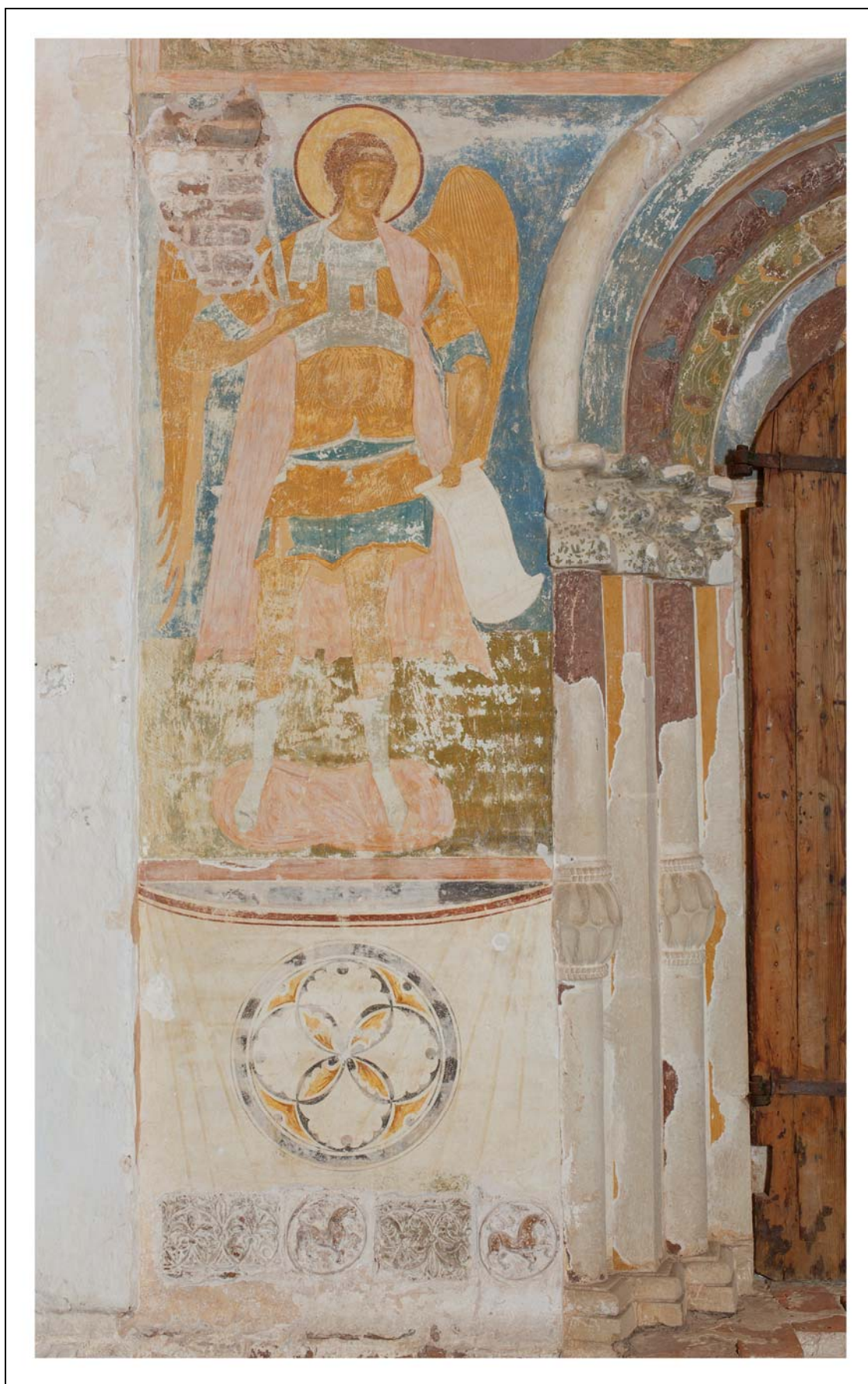




**Fig. 35. Brush marks of the artist who painted folds of veils. Photo by I. Khobotov.**



**Fig. 36. Archangel Gabriel and the circle of veils under him. Fresco of the western facade of the Nativity of the Virgin Cathedral in the Ferapontov Monastery. Photo by I. Khabotov.**



**Fig. 37. Archangel Michael and the circle of veils under him. Fresco of the western facade of the Nativity of the Virgin Cathedral in the Ferapontov Monastery. Photo by I. Khobotov.**

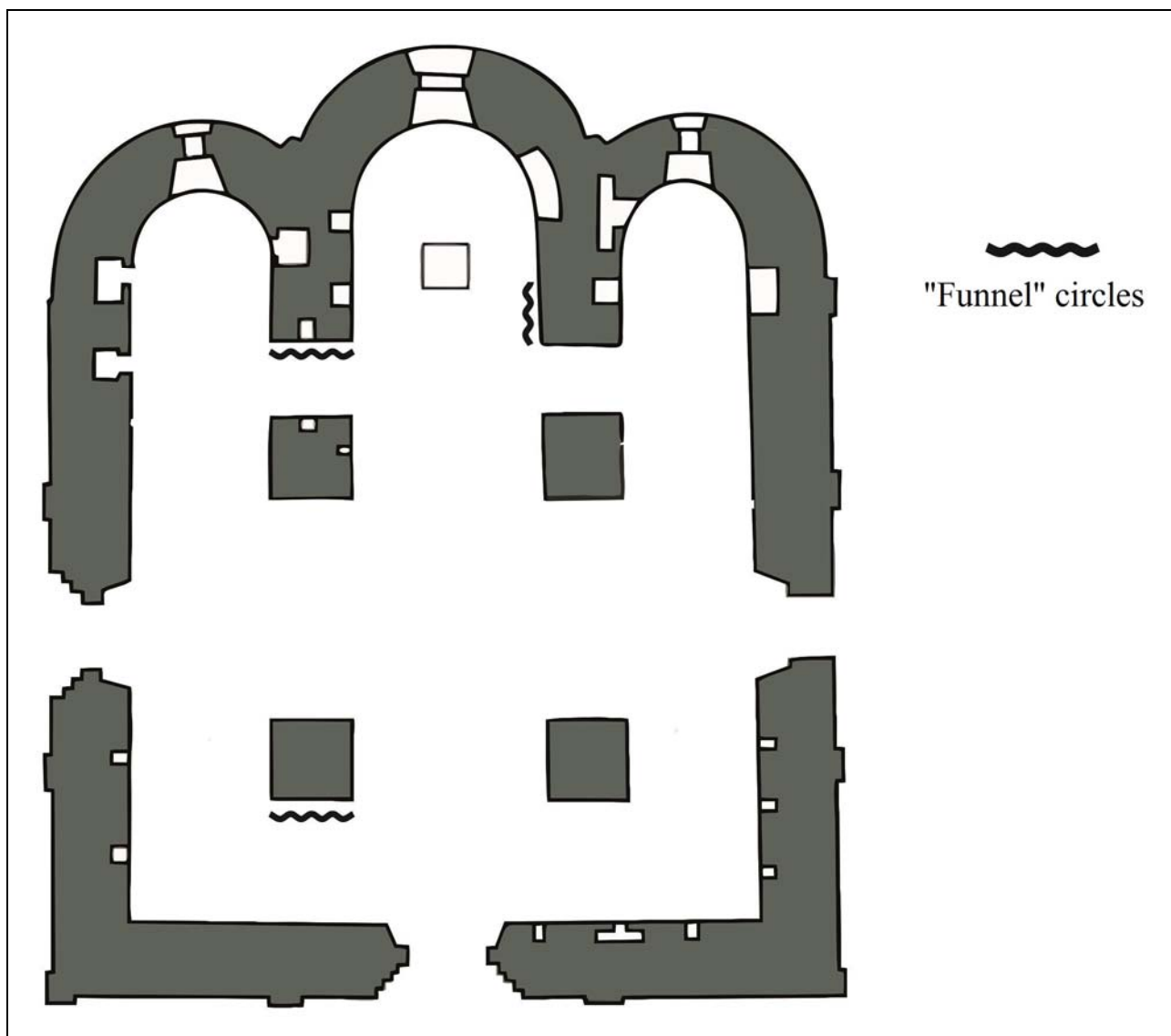


Fig. 38. Circles of the “funnel” on the borders of new spaces. Drawing by the author.