

# Reconstruction of Tile Ornamentation of the Opus Sectile Floor in the Church of the Saviour, Galich

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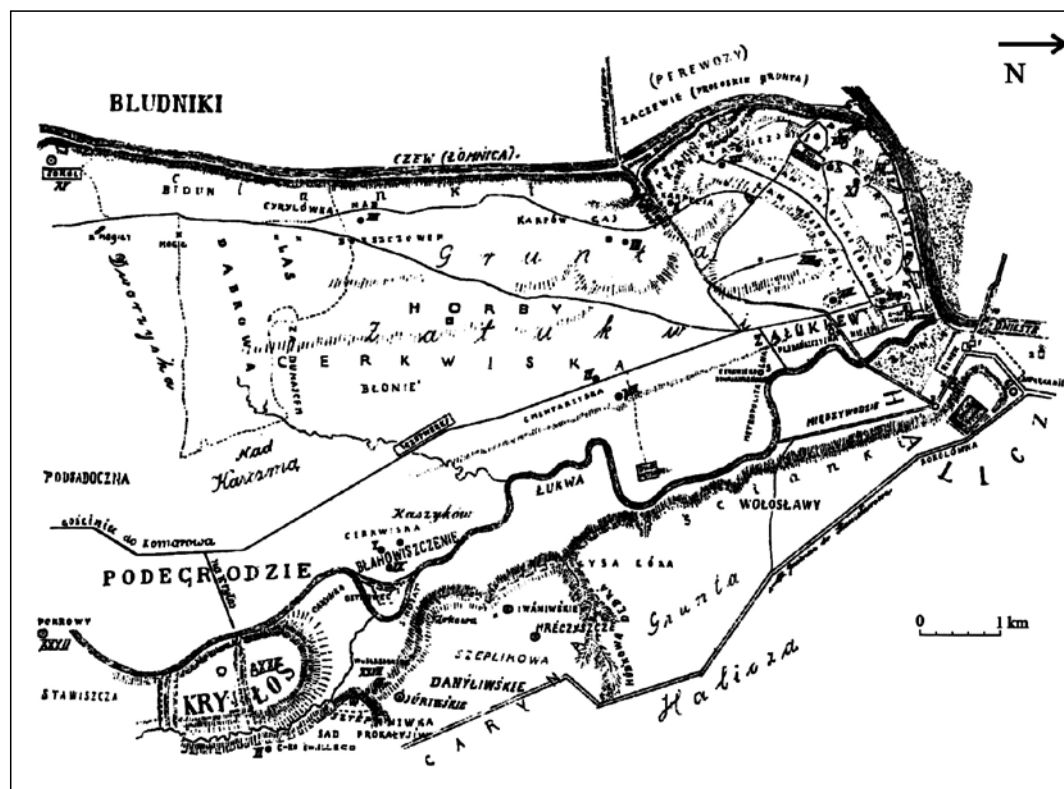
The article describes the reconstruction of the opus sectile floor in the Church of the Saviour in Galich. The reconstruction is based on the typology of tiles found during the excavations in the church. They have been divided into three groups. In the first group there are tiles of a simple geometrical shape (triangular and square) made into moulds. The second group comprises complex geometrical shapes (subrectangular, arcuate, edged pyramidal and compound teardrop) with one rounded edge, also made into moulds. In the third group are figurative shapes (with abstract patterns and parts of scenes), cut with a knife. Each tile group was located in a special section of the floor. The first group was used to decorate the main area of the church, the second to make a circular composition (omphalion) in the square below the dome, and the third to make the image of a dove, the symbol of the Holy Spirit. Although the reconstruction is partly hypothetical, it corresponds to similar historical buildings in Galich.

## Keywords/klíčová slova:

Galich/Halič – ceramic tiles/keramické dlaždice – mosaic floor/mozaiková podlaha

The city of Galich, the former capital of powerful Galich and then the Galich-Volhynia principality, is now a small town in the Ivano-Frankovsk region of Ukraine. However, in the 12<sup>th</sup> and 13<sup>th</sup> centuries it was one of the largest cities of Kievan Rus. The Church of the Saviour (Fig. 1), possibly the first stone building in Galich, was situated in the north-west part of the ancient city, near the present village of Shevchenkovo.

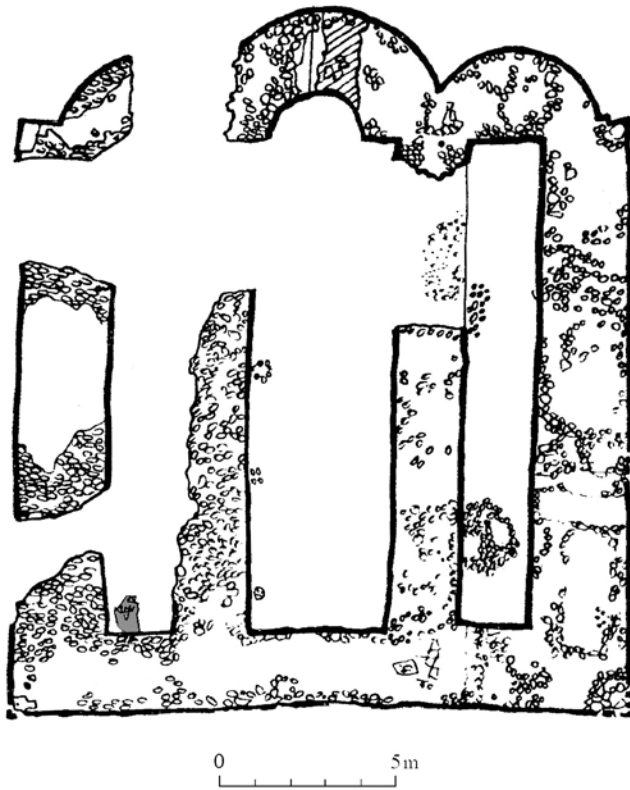
Fig. 1  
Map of ancient Galich (from: Peleński 1914, Tab. I).



It was built in the first part of the 12<sup>th</sup> century, as it is mentioned in the year 1152, in the time of a dispute between Galich Prince Vladimirko and Kiev ambassador Petr Borislavich. In the Ipatievskaya Chronicle we read: "When Petr rode out of the prince's court, Vladimir went to the church of the Saviour and, on the way to the church, he saw Petr and insulted him" (Polnoe sobranie 1908, column 462).

The building was first explored in 1882 by a local amateur historian, priest Lev Lavretsky, and by Isidor Sharanievich, a professor from Lvov. They also determined it as the Church of the Saviour. Only the foundations had remained by the time of the first excavations, but there was a small section of the floor discovered in the north longitudinal stretch of foundations (Zacharjewicz 1883, 163). After the excavations finished, the ruins were not buried and were taken to pieces by local inhabitants. And before the First World War, an Austrian trench was built on the site, in the place where a lot of triangular tiles were found (Peleński 1914, 72).

More recent excavations were carried out in 1980–1981 by the Galich unit of the Architectural-Archaeological Expedition of the Leningrad branch of the Institute of Archaeology and State Hermitage under the direction of Oleg Ioannisyan. It resulted in the opening of the foundations of the church, only preserved in sections. And only a small part of original floor (fixed in 1882 – Figs. 2, 3) was left near the foundations in the north-west corner of the building (Ioannisyan 1980, 7). It was paved by tiles of a triangular shape, covered by brown, yellow and green glazing, and strips of tiles were also placed across



the walls of the church. In addition, there were about one thousand three hundred fragments of tiles of various shapes found in the ruins (Ioannisyana 1981, 8). How were they laid? What ornament did they make? These questions could be answered after the studying the tiles. Their shape and quantity help us understand where the tiles originally were. The first step is their classification. All the tiles from the Church of the Saviour could be divided into three groups.

First group: tiles of a simple geometrical shape (triangular and square), made into moulds (Figs. 4:1, 2).

Second group: tiles of complex geometrical shapes (subrectangular, arcuate, edged pyramidal and compound tear-shaped) with one (or more) rounded edge, also made into moulds (Figs. 4:3-6).

Third group: tiles of figurative shapes (of abstract shapes and with parts of scenes), cut with a knife (Figs. 4:7, 8).

**Group 1 (simple geometrical shapes)**

**Type 1 (Figs. 5:1, 2).** There are twelve hundred seventy-eight tiles of this type, which makes it the largest group. All the tiles are triangular-shaped, covered in a flat layer of bright glaze that looks heavily worn. There are six hundred fifty-eight tiles with a lemon-colour glaze, three hundred and four with brown, two hundred twenty-five with beige and eighteen with a green glaze. Originally, there were only two colours used for the tiles: yellow and brown. Beige and green are the result of the decomposition of the glaze. It is confirmed by the colour of the glaze on the sides (that preserve the original colour because they are set in mortar), which is yellow and brown. It should be noted that these two colours are also typical of other types of tiles.

Fig. 2  
Plan of the Church of the Saviour in Galich (from: Ioannisyana 1986).

Fig. 3  
Part of the original floor in the Church of the Saviour in Galich, discovered in 1980. 1 – Draft; 2 – Photograph (from: Ioannisyana 1980, Fig. 14, 15).

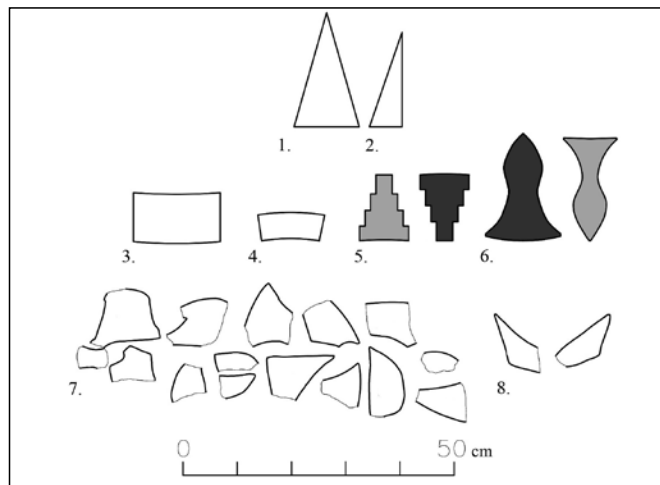
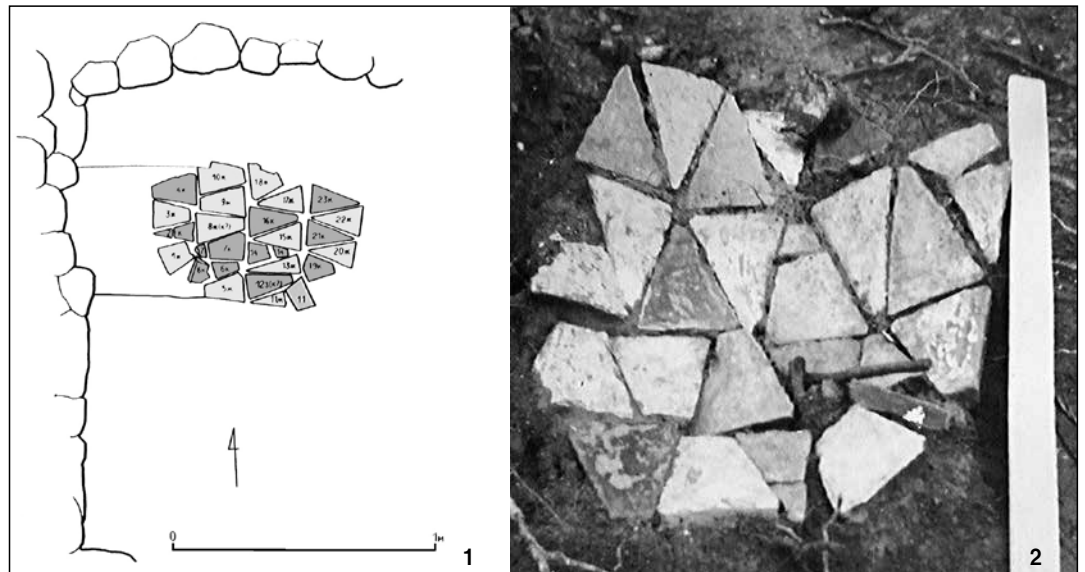
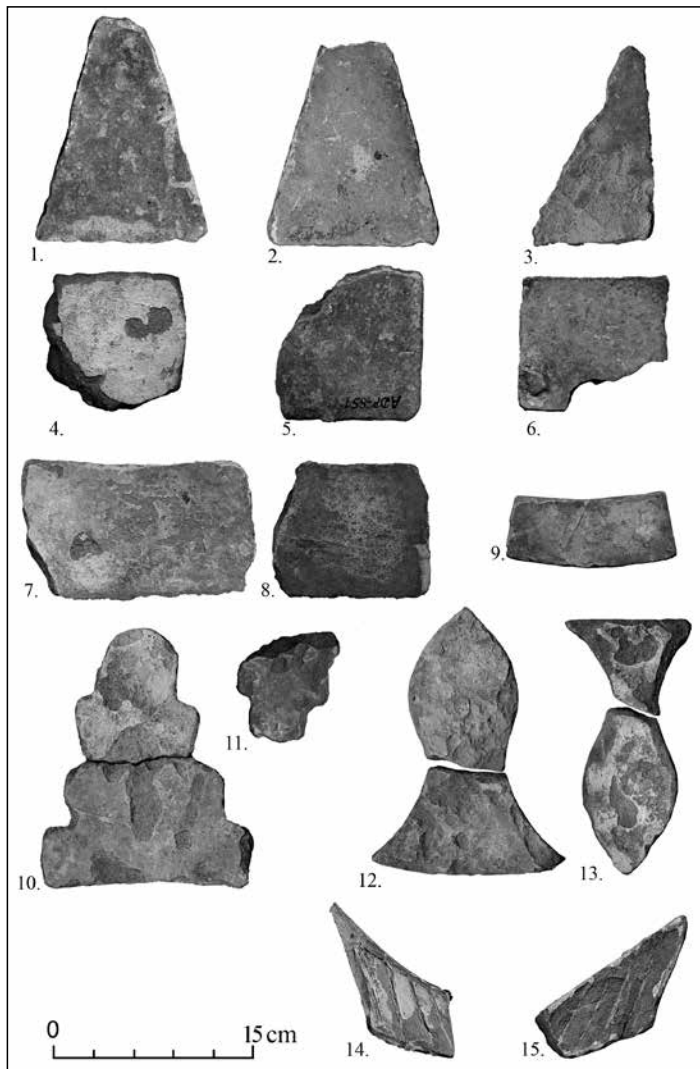
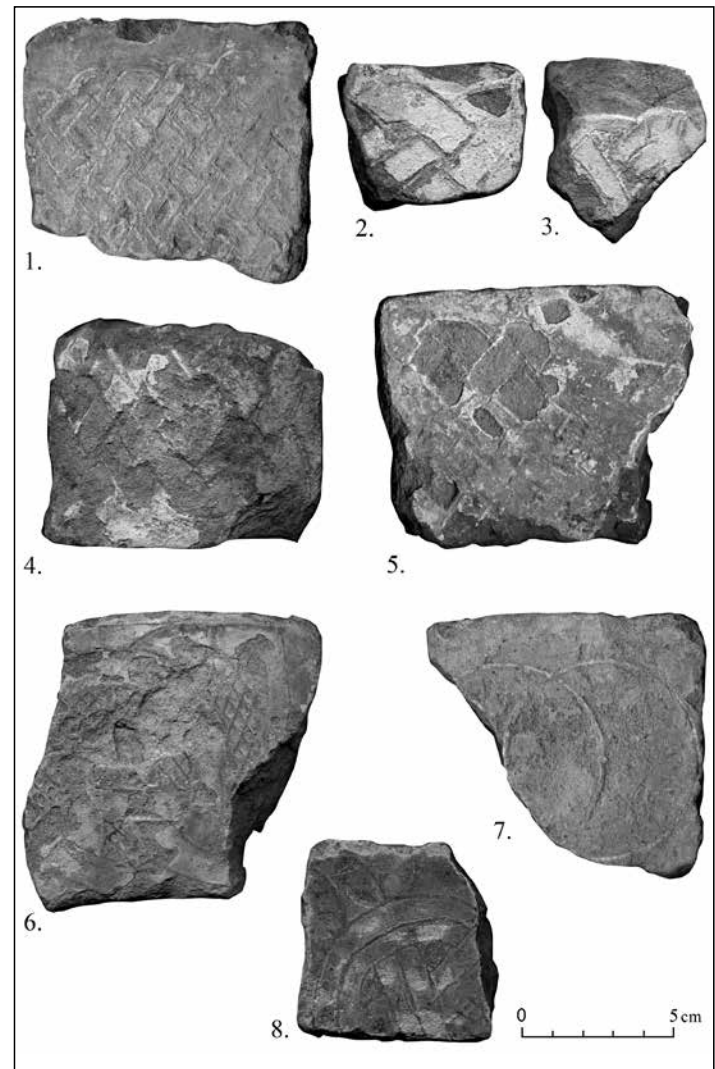


Fig. 4  
Draft of the types of tiles used in the Church of the Saviour in Galich. 1 – Type 1; 2 – Type 1a; 3 – Type 2; 4 – Type 3; 5 – Type 4; 6 – Type 5; 7 – Tiles of abstract shapes; 8 – Tiles – parts of scenes.



**Fig. 5**  
 Photograph of the types of tiles used in the Church of the Saviour in Galich. 1, 2 – Type 1; 3 – Type 1a; 4–6 Semi-square tiles attributed to the first group; 7, 8 – Type 2; 9 – Type 3; 10, 11 – Type 4; 12, 13 – Type 5; 14, 15 – Tiles – parts of scenes.



**Fig. 6**  
 Photograph of the types of ornamentation of the tiles in the “cloisonné” technique. 1–5 – Large-scale network-like ornament; 6 – Network of small rhomboids; 7 – Intersecting rings; 8 – Sophisticated compositions of circles and lines.

**Type 1a (Figs. 5:3).** It is a right-angled triangular shape tile, fully similar to type 1. It corresponds by dimensions and shape to half of tile of type 1.

Also to first group attributed some of semi-squared tiles, which original shape reconstructed only approximately (Figs. 5:4–6). Because of their heterogeneity they couldn't be connect in one type.

#### Group 2 (complex geometrical shapes)

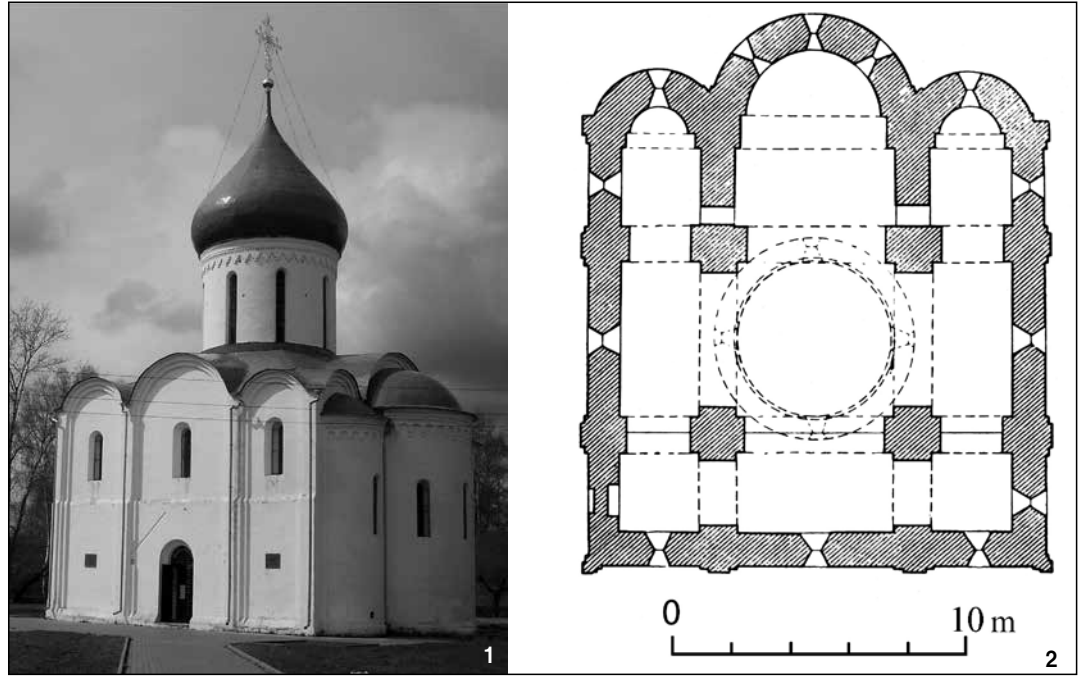
**Type 2 (Figs. 5:7, 8).** Tiles of a subrectangular shape. Their dimensions are 16 × 9 cm, the thickness is two and half cm. The long sides are slightly rounded, small tiles are rounded inside, large ones outside.

**Type 3 (Figs. 5:9).** Arcuate tiles. Their dimensions are twelve x four and half, the thickness is 2.2 cm. The tiles were made into moulds without top and bottom, the sides were trimmed with a knife and rounded. There is a zigzag ornament on the tile face. It is possible that it once occupied the whole area of the tiles, but because of the deterioration of the glaze we can see only the central part in the form of the letter “V”.

**Type 4 (Figs. 5:10, 11).** “Edged pyramidal” shape. The tiles have the shape of an upward four-stepped pyramid. There was no intact tile found, so their dimensions can be only reconstructed as twelve x nine cm, the thickness is about two and half centimetres. The corners of the ledges are straight but slightly rounded. The sides are concave and sloped inside. The tiles with the yellow glaze have wide edges rounded inside, those with a brown glaze outside.

**Type 5 (Figs. 5:12, 13).** Tiles in the shape of a “compound teardrop”. It is a provisional name, in fact the tiles are of a more sophisticated fashion. The fifth type has two variations: large ones (length 20 cm, width 12.5, thickness 2.8 cm, brown glaze, wide edges rounded inside) and smaller ones (length 18.5 cm, width 9 cm, thickness 2.5 cm, yellow glaze, wide edges rounded outside).

Fig. 7  
Church of Transfiguration in  
Pereyaslavl-Zalessky; the most similar  
analogy of the Church of the Saviour  
in Galich. 1 – Exterior view  
(photographed by the author);  
2 – Plan (from: Voronin 1961, 81).



### Group 3 (tiles of figurative shapes)

**Tiles of abstract shapes.** These tiles have complex shapes with arcuated edges, no two are similar. Because all the tiles are in fragments, their original form could not be reconstructed. Beyond doubt, the shape of each tile was individual. All the tiles were made from one circular piece of clay, cut with knife.

**Tiles – parts of scenes (Fig. 5:14–15).** There are two trapezoidal tiles, probably imitating bird's wings. They are decorated in the "cloisonné" technique.

Tiles with the "cloisonné" technique should be described in detail. These tiles are unique, there is no analogy in Kievan Rus (Ioannisyana 1981, 9). Their original shape is unknown, most of them were trapezoidal. The image was scratched into raw clay, the grooves were filled with a thin layer of glaze that created a linear pattern of ornament. The entire surface of the tile was then covered in glaze, which to some extent offset the drawing. The glaze used for these tiles was also yellow and brown (in some cases looks beige). The tiles were decorated with different ornaments, but because of the small number of samples, it is difficult to determine whether it made up a pattern or a letter.

There are the following sorts of patterns:

- large-scale network-like patterns: overlapping rectangulars with the dimensions of one and a half × 0.5 cm, laid perpendicularly (Figs. 6:1–5)
- network of small rhomboids (Fig. 6:6)
- intersecting rings (Fig. 6:7)
- sophisticated compositions of circles and lines (Fig. 6:8).

It is not known where exactly these tiles were laid. Judging by the different shapes, these tiles were in different positions, in different types.

On the basis of the classification, reconstruction of the decoration of floor was made, based on a hypothetical reconstruction of the plan of the Church of the Saviour. It should be noted that by the time of the excavations only damaged foundations of the church were preserved and therefore there is no published reconstruction. So for this purpose the most similar analogy was used (Ioannisyana 1988, 44) – the plan of the Church of the Saviour in Pereyaslavl-Zalessky (Voronin 1961, 81; Fig. 7). For the sake of analogy of the tile decoration, the decoration of the preserved floors in the Lower Church in Grodno (second half of the 12<sup>th</sup> century; Malevskaya 1968, 148; Fig. 8:1) and in the rotunda in Oleshkov (second half of the 12<sup>th</sup> century – first half of the 13<sup>th</sup> century; Tomenchuk 2005, 115–116) were used (Fig. 8:2).

Groups of tiles uncovered on the floor in various forms allow to presume floor decoration in three different areas that were separated from each other by the way the tiles were laid.

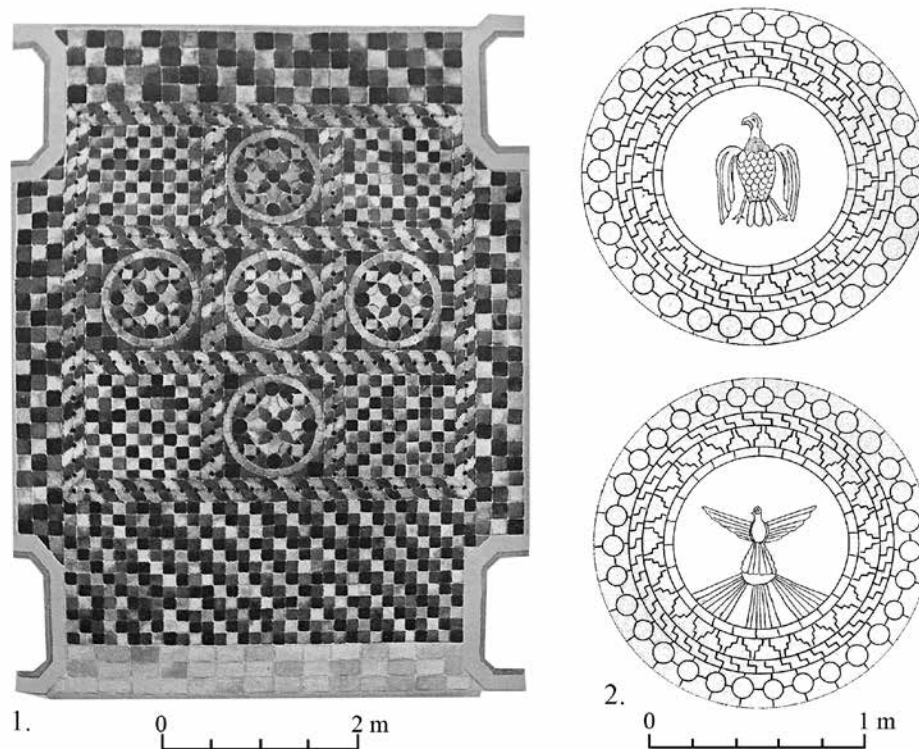
Group 1. Longitudinal way of laying the tiles: group of tiles following the axes of the church.

Group 2. Circular way – group of tiles following zones.

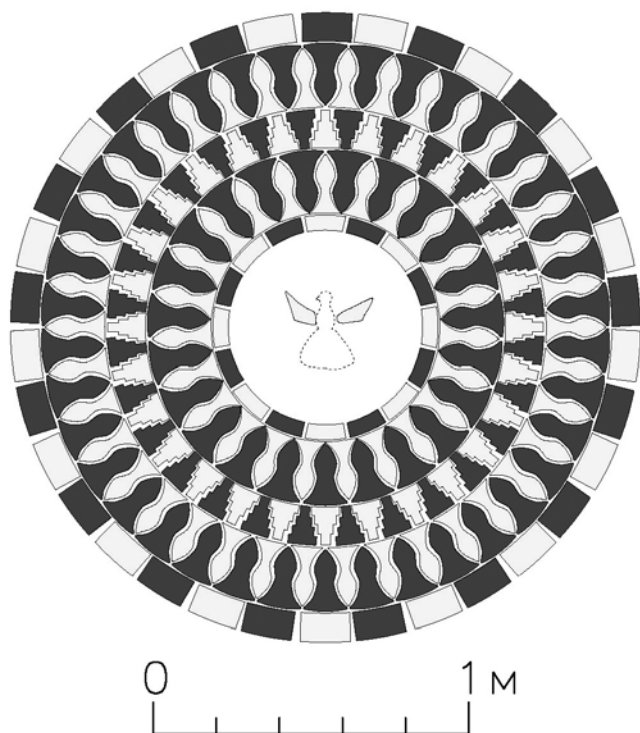
Group 3. Mosaic way – group of tiles making up a composition.

There is a significant amount of all the tiles related to the examples of the first type of the first group. This indicates that they occupied the largest part of the church. Most likely, apses were not part of this area because this is a special part of the church that was usually decorated more luxuriously. Also, it corresponds to the square below the dome, which was often decorated separately. Nearly seventy-three hundred tiles were used for the nave. The way of their interconnected laying is reconstructed in situ in the preserved part of the floor in the north-west corner of the church. This way of laying has only one drawback: there are gaps near the wall in the form of a half of a triangle. To fill these gaps, tiles in the shape of rectangular triangles, i.e. type 1a, were used.

Fig. 8  
Analogies of the mosaic floor in the Church of the Saviour in Galich from other buildings in Kievan Rus.  
1 – Reconstruction of the floor in the Lower Church in Grodno (from: Malevskaya 1966, 148);  
2 – Reconstruction of the omphalion in the rotunda in Oleshkov (from: Tomenchuk 2005, 115, 116).



There were also square tiles in the first group. They could be used for the decoration of various places in the nave, we do not know exactly where. Square tiles are usually found in diagonal patterns of floors where they occupy the main area of the nave. But as in the Church of the Saviour the floor is mostly covered in triangular tiles, square tiles only occupied a small section of the church. In comparison with the preserved floor in the Lower Church in Grodno, we can suppose that the square tiles were placed between the pillars below the dome.

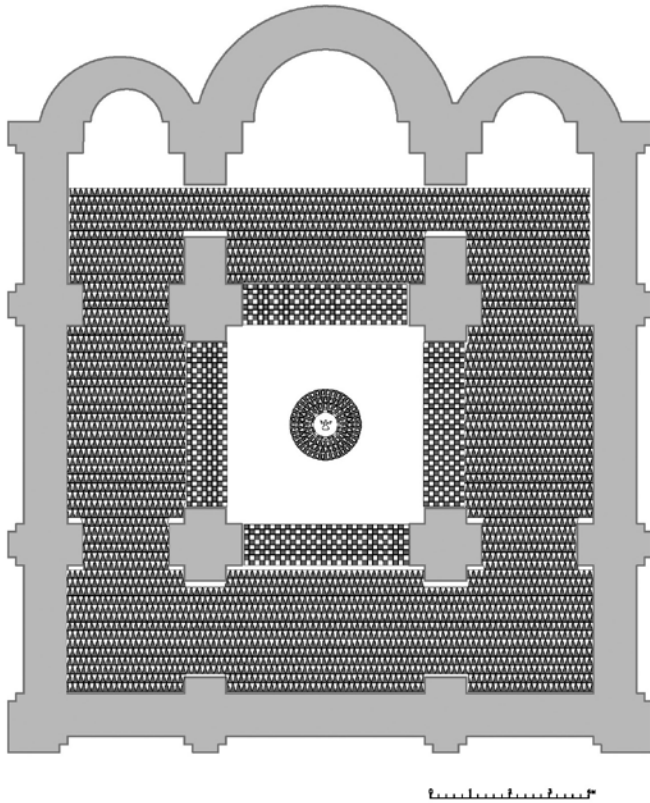


The tiles in the second group, which have at least one rounded side, form a circular composition of several zones. The zones consist of different tiles and, given the four types of tiles, we can define at least four different zones of decoration. For the definition of the order of the disposition of the zones, the most important is the radius of the tiles. It is different for each type and allows to form circles, from bigger to smaller ones. The zone of trapezoidal tiles has the largest radius (100 cm), inside it there were tiles of the “compound teardrop” (90 cm) shape and “edged pyramidal” (70 cm; brown tiles have a curved side outside, yellow tiles inside). Closer to the composition centre there was a zone of tiles of the arcuated shape (35 cm). In this case there is a space between the zone of “arcuated tiles” and pyramidal ones, of 24 cm, which is enough to the second zone of “drop” tiles. This circular composition with the diameter of more than 1 meter was most likely situated in the square below the dome and formed an omphalion (Fig. 9).

Cut tiles in the third group were part of one whole composition. The fact that two trapezoidal tiles imitate bird's wings allows us to suppose that the centre of the composition was an image of a bird, and the other tiles made a background. It is impossible to exactly reconstruct the appearance of the bird because there are only the wings left. The bird could only be defined as an eagle or a dove. But the eagle is usually depicted with spread wings turned down. In this case, the wings are spread sideways and up, which corresponds to the image of the Holy Spirit in shape of a dove.

The hypothetical reconstruction made was based on the form of the tiles (Fig. 10). It followed the main tendency of the decoration: a simple ornament in the main area, omphalion in the square below the dome and a figurative composition in its centre. Also, it fully corresponds to other similar historical buildings in Galich. Tiles that were parts of an omphalion were found in many churches of the Galich principality: the Church of the Annunciation in Tserkviski, Galich (Ioannisyana 1994–1996, 31), the Church of St. Paraskeva Pyatnitsa and an unknown church in Zvenigorod (Mogitch 1994, 55), and the rotunda in

Fig. 9  
Reconstruction of the omphalion in the Church of the Saviour in Galich.



Oleshkov (Tomenchuk 2005, 115, 116). The omphalion in the Oleshkov rotunda is the closest analogy to the omphalion in the Church of the Saviour because of its structure. Also, in the centres of both compositions there was a dove. It is possible that the dove in the centre of the church corresponded to a dove in the dome where it is often depicted today.

The origin of this composition is a special issue that requires further research. The opus sectile technique first appeared in antiquity, then became widespread in the last phase of the Roman empire and in Byzantium. The adoption of the Byzantine tradition of luxurious floors made of marble pieces only appeared in the Tithe (Desyatinnaya) church (end of the 10<sup>th</sup> century), where a splendid floor with an omphalion was found (Khrushkova 2012, 48–50). The Kiev and Novgorod Sophia cathedrals (mid-11<sup>th</sup> century) did not contain marble but enamel, and the composition was different. In the 12<sup>th</sup> century, only ceramic tiles were used for these techniques. The omphalion was only widespread in the architecture of the Galich principality, and the first one in Galich was the omphalion in the Church of the Saviour.

Fig. 10  
Reconstruction of tile ornamentation  
of the opus sectile floor in the Church  
of the Saviour in Galich.

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**Rekonstrukce ornamentu dlaždic podlahy s deskovou mozaikou v Chrámu Spasitele v Haliči**

Halič, bývalé hlavní město mocného haličského knížectví (později Halič–Volyň), je dnes malým městem v Ivanofrankivské oblasti Ukrajiny, avšak v dobách Kyjevské Rusi patřilo k největším v zemi. V severozápadní části starého města, poblíž dnešní vesnice Ševčenkovo, stával Chrám Spasitele, pravděpodobně první kamenná budova v Haliči. Byl postaven v 1. polovině 12. století, neboť je zmiňován roku 1152 v období sporu mezi haličským knížetem Vladimírkem a kyjevským vyslancem Petrem Borislavičem.

Archeologický výzkum kostela proběhl v letech 1882 a 1980–1981. Během vykopávek byly objeveny základy kostela, které se dochovaly jen částečně. Našla se pouze malá část původní podlahy, poblíž základů v severozápadním rohu kostela. Kromě toho bylo objeveno asi 1300 zlomků dlaždic různého tvaru. Dlaždice z kostela lze rozdělit do tří skupin.

1. Dlaždice jednoduchých geometrických tvarů (trojúhelníkové a čtvercové) vyrobené ve formě.
2. Dlaždice složitých geometrických tvarů (subrektangulární, obloukovité, pyramidální a slzovitého tvaru) s jedním nebo více zaoblenými rohy, rovněž vyrobené ve formě.
3. Dlaždice figurálních tvarů (abstraktní tvary s částmi vyobrazení) řezané nožem.

Na základě klasifikace dlaždic byla provedena rekonstrukce vzoru podlahy. Hypotetická rekonstrukce plánu podlahy v Chrámu Spasitele vychází z nejpravděpodobnější analogie, podlahy v Chrámu Spasitele ve městě Pereslavl-Zaleskij. Objevené soubory dlaždic naznačují, že podlaha byla zdobena ornamentem ve třech částech, které byly vzájemně oddělené řadou dlaždic.

Skupina 1: dlaždice položené podélně; soubor dlaždic sledujících osu kostela.

Skupina 2: dlaždice položené do kruhu, podle jednotlivých zón podlahy.

Skupina 3: dlaždice tvořící mozaiku; kompozice obsahovala jedno téma.

Hypotetická rekonstrukce založená na tvaru dlaždic je adekvátní podmínkám výzkumu. Vyplývá z ní hlavní obsah vzoru podlahy: jednoduchý ornament v hlavní části, omfalion ve čtverci pod kopulí a figurální kompozice v jeho středu. Tento styl rovněž odpovídá dalším historickým budovám v Haliči.

**Popisy obrázků**

- Obr. 1**  
Mapa historické Haliče (Pelenski 1914, Tab. I).
- Obr. 2**  
Půdorys Chrámu Spasitele v Haliči (Ioannisyan 1986).
- Obr. 3**  
Část původní podlahy Chrámu Spasitele v Haliči objevená v r. 1980. 1 – nákres; 2 – fotografie (Ioannisyan 1980, obr. 14, 15).
- Obr. 4**  
Nákres typů dlaždic použitých v Chrámu Spasitele v Haliči. 1 – typ 1; 2 – typ 1a; 3 – typ 2; 4 – typ 3; 5 – typ 4; 6 – typ 5; 7 – dlaždice abstraktních tvarů; 8 – dlaždice – části výjevů.
- Obr. 5**  
Fotografie typů dlaždic použitých v Chrámu Spasitele v Haliči. 1, 2 – typ 1; 3 – typ 1a; 4–6 poločtvercové dlaždice řazené do 1. skupiny; 7, 8 – typ 2; 9 – typ 3; 10, 11 – typ 4; 12, 13 – typ 5; 14, 15 – dlaždice – části výjevů.
- Obr. 6**  
Fotografie typů ornamentálních dlaždic, technika „cloisonné“. 1–5 – velký síťový ornament; 6 – síť malých kosočtverců; 7 – protínající se kruhy; 8 – složité kompozice z kruhů a linií.
- Obr. 7**  
Chrám Převtělení ve městě Pereslavl-Zalesskij, nejbližší analogie Chrámu Spasitele v Haliči. 1 – exteriér (foto autor); 2 – půdorys (Voronin 1961, 81).
- Obr. 8**  
Analogie mozaikové podlahy v Chrámu Spasitele v Haliči z dalších historických budov Kyjevské Rusi. 1 – rekonstrukce podlahy Doiniho kostela v Grodně (Malevskaja 1966, 148); 2 – rekonstrukce omfalionu z rotundy v Oleškově (Tomenčuk 2005, 115, 116).
- Obr. 9**  
Rekonstrukce omfalionu v Chrámu Spasitele v Haliči.
- Obr. 10**  
Rekonstrukce ornamentu dlaždic podlahy s deskovou mozaikou v Chrámu Spasitele v Haliči.