

# Faux Marbling Motifs in Early Christian Frescoes in Central and South Dalmatia: Preliminary Report

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# FAUX MARBLING MOTIFS IN EARLY CHRISTIAN FRESCOES IN CENTRAL AND SOUTH DALMATIA: PRELIMINARY REPORT

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## Abstract

Throughout history, the faux marbling technique has been used as a more accessible substitute for natural marble and stone in decorating prestigious parts of structures of religious and secular use. The significance of this decorative technique in Dalmatia was expressed in the art of the Early Christian period, when reductions in the marble and stone market occurred due to the decay of the Roman Empire. The history and use of the faux marbling technique is under-researched and inadequately evaluated, especially along the eastern Adriatic coast. The aim of this study is to try to determine which types of natural marble or stone correspond to the examples of faux marbling found in archaeological sites presented. This comparison is expected to lay the foundation for a database for the classification of the types and origin of marble and stone used as templates in the implementation of imitations fabricated using the technique of faux marbling. The study used several representative examples of faux marbling on a number of sites in Central and Southern Dalmatia.

## Keywords

faux marbling, Early Christianity, Dalmatia

## Introduction

Marble is a material that throughout history, until recent times, has retained the title of luxurious and required merchandise, for a number of reasons, mainly because of the limitations and costs in the production, transportation and distribution. Therefore, it is not surprising that marble was a material mostly available only to the wealthiest institutions and members of society. During Antiquity the Mediterranean was known for widespread commercial activities, including a vigorous trade in marble products, numerous records of which exist in the remains of the quarries, archaeological sites, and written historical sources. The

marble trade usually started at the loading ports situated near the quarries where the ships were loaded with extracted marble or stone blocks, which were then transported via known maritime routes toward the destined unloading ports, which were spaced all over the Mediterranean.<sup>1</sup> As for the Adriatic basin and its centres, the marbles were mostly imported from the territory of the Aegean coast and from the province of Asia Minor, where various known marbles were discovered and commercially used.

A number of underwater archaeological sites in the Mediterranean confirm the high intensity of trade in such products, which were, due to their weight, often liable to be sunk in wrecks during unfavourable weather conditions and violent storms.<sup>2</sup> There are numerous underwater sites that contain marble and semi-finished marble products inside the borders of the Croatian territorial sea. Those products were intended to decorate the then luxury villas, palaces, religious and public buildings.<sup>3</sup>

According to Diocletian's Edict on Maximum Prices (issued in 301 CE)<sup>4</sup>, which among other goods and services included prices for maritime transport, four regular maritime routes that connected Nicomedia, Syria, Africa and Alexandria were known to be important.<sup>5</sup> In addition to the fact that within the Diocletian's Palace in Split (built between 295-305 CE) 16 different types of imported decorative stone and marble (with their specific prices listed in the Edict) were studied, we can conclude that this valuable material was extensively traded as well as used to decorate the luxurious interior and exterior spaces.<sup>6</sup>

1 POTTER, 2009.

2 PARKER 1992, 580.

3 VRSALOVIĆ 1974, 53, 240.

4 „*Edictum Diocletiani de pretiis rerum venalium*“; PRANTL 2011, 359-398.

5 MARIN 2012, 123-128.

6 MARASOVIĆ, MATETIĆ POLJAK 2010, 89-100.



Fig. 1.  
Location of the studied sites with faux marbling motifs in Central and South Dalmatia (source: hr.wikipedia, Nikola Radošević)

In the environment of the new spiritual impulse that the new Christian faith had introduced, tectonic movements within the usual symbolism of art forms occurred, radical artistic novelties that were to represent the collective consciousness. Attempts at imitating various forms were elements of artistic expression that should be regarded primarily within the space-time determinism and context. Common forms of faux marbling in the Early Christian period were not necessarily the result of a lack of funding, limited skills or knowledge, but rather part of a conscious choice of visual language. However, the fact remains that during Late Antiquity and the Early Christian period, the production, distribution and supply of all types of marble drastically declined due to inflation and the slow, but inevitable collapse of the Western Roman Empire. Consequently, this had a severe negative effect on the use of stone and marble panels as decorative materials in new buildings.

The term “faux marbling” describes a technique where different types of substrates are painted in order to achieve an effect that mimics the layout of the original stone material. Faux marbling is often executed as a simple form of fresco technique where pigments diluted in lime water or milk are applied on the surface of fresh lime mortar, trying to evoke the texture and exuberant form of certain types of marble. The aim of the artist is usually to get as close to the original marble texture as possible. The pigment was often applied over a lightly toned background with red to brown hues.<sup>7</sup>

### Faux marbling motifs identification

The study used several representative examples of faux marbling on a number of sites in Central and Southern Dalmatia. Historical and archaeological sites presented in this paper are the Basilica of St Lawrence, Lovrečina (Brač), the Church of St John and St Theodore in Bol (Brač), the Early Christian baptistery of the Church of St John the Baptist in Povlja (Brač), the remains of the fragments in the Episcopal Complex in Salona (Solin), and the baptismal well at the church of St Vitus (Vid near Metković) (Fig. 1).

During the research phase, selected faux marbling motifs were each compared with several real marble samples that were widely used in antiquity, some of which are found at sites along the eastern Adriatic coast.<sup>8</sup> Marble samples were compared and selected as a possible source of inspiration for Early Christian period artists, who could use them as templates for their work. Marble samples were chosen according to the following criteria: similarity of colour (both grain and veins), shape of grain and veins, and size ratio of grain and veins.<sup>9</sup> After the selection, results for each faux marbling motif are shown in the separate tables.

7 MATULIĆ, 78-79.

8 MARASOVIĆ, MATETIĆ POLJAK 2010, 91.

9 Marble samples were not selected by means of measuring the true diameter of grains and number of grains per cm<sup>2</sup>, since it was not possible to precisely evaluate whether Early Christian period artists and craftsmen, if they were using true marble panels as templates, also used an approximation of their original matrix or grain size scale.





Fig. 2. NW panel with remains of fresco painting decorated with faux marbling motifs (St John, Povlja) (photo: T. Borovac, B. Matulić)

## Povlja

### Church of St John the Baptist<sup>10</sup>

Povlja is a small village situated in a deep bay in the north-eastern part of Brač Island. Marbling panels that were discovered in the church of St John the Baptist were part of wall decorations of an Early Christian baptistery from the 6<sup>th</sup> century.<sup>11</sup> These representative examples of Early Christian wall decoration were originally painted in the *fresco* and were partially finished in the *secco* method.<sup>12</sup>

Frescoes with a characteristic painted imitation of marble plates and slabs were discovered in each of the four semi-circular niches of the baptistery (Fig. 2).

In each niche the wall is divided into two rectangular panels, which are surrounded with crimson bands. The left panel is encircled by a band decorated



Fig. 3. Detail of SIK\_1 motif (St John, Povlja) (photo: T. Borovac, B. Matulić)

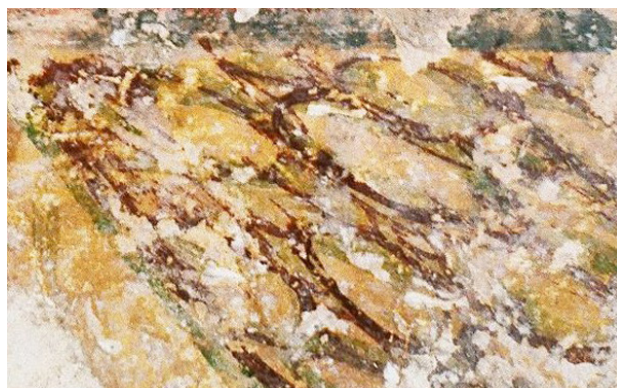


Fig. 4. Detail of SIK\_2 motif (St John, Povlja) (photo: T. Borovac, B. Matulić)

with an imitation of yellow marble with elongated, oval-shaped grains. The central part of the left field consists of a rectangle with a painted imitation of marble with light tinted pinkish-coloured grains of circular and oval shape, surrounded and enveloped by reddish veins. The right panel is encircled by a band painted dark green. The central area of the right panel is decorated with imitation marble consisting of yellow, oval-shaped grains very similar to those found in the left field. Considering their state of preservation, two samples of faux marbling motifs were chosen for the comparison.

For the first sample (DES SIK\_Povlja\_1),<sup>13</sup> depicting marble with light tinted pinkish-coloured grain of circular and oval shape, surrounded and enveloped by reddish veins (Fig. 3), three marble samples were selected and compared within the study phase:

The first was Frigio o Pavonazzetto (Lat. *Marmor Docimium*, *Marmor Synnadicum*, *Marmor Phrygium*) (Asia Minor), the second Breccia corallina (Lat. *Marmor*

10 Croatian; sv. Ivan Krstitelj.

11 JELIČIĆ-RADONIĆ 1992, 143.

12 BOROVIAC, MATULIĆ, 2005.

13 DES – designation, SIK – sveti Ivan Krstitelj (Eng: St. John the Baptist).

<i>Site</i>	<i>Geographical position</i>	<i>Faux marbling sample designation</i>	<i>Marble sample</i>	<i>Marble origin</i>
St John the Baptist (Baptistery)	Povlja Brač island Splitsko-dalmatinska County	SIK_Povlja_1	Frigio o Pavonazzetto (Lat. <i>Marmor Docimium</i> , <i>Marmor Synnadicum</i> , <i>Marmor Phrygium</i> )	Iscehisar Phrygia Asia Minor Turkey
St John the Baptist (Baptistery)	Povlja Brač island Splitsko-dalmatinska County	SIK_Povlja_1	Breccia corallina (Lat. <i>Marmor Sagarium</i> )	Vezirhan Bithynia Asia Minor Turkey
St John the Baptist (Baptistery)	Povlja Brač island Splitsko-dalmatinska County	SIK_Povlja_1	Lumachella rosa	Kairouan North Africa Tunisia

Table 1. Comparison of SIK\_Povlja\_1 motif with several marble samples from antique quarries

<i>Site</i>	<i>Geographical position</i>	<i>Faux marbling sample designation</i>	<i>Marble sample</i>	<i>Marble origin</i>
St John the Baptist (Baptistery)	Povlja Brač Island Splitsko-dalmatinska County	SIK_Povlja_2	Breccia di Sciro o di Settebasi (Lat. <i>Marmor Scyreticum</i> ) Sample 1	Sciro Island Greece
St John the Baptist (Baptistery)	Povlja Brač Island Splitsko-dalmatinska County	SIK_Povlja_2	Breccia di Sciro o di Settebasi (Lat. <i>Marmor Scyreticum</i> ) Sample 2	Sciro Island Greece
St John the Baptist (Baptistery)	Povlja Brač Island Splitsko-dalmatinska County	SIK_Povlja_2	Breccia dorata	Montagnola Tuscany Italy

Table 2. Comparison of SIK\_Povlja\_2 motif with several marble samples from antique quarries

*Sagarium*), and the third sample selected was Lumachella rosa (North Africa).<sup>14</sup>

After studying their colour, grain size and distribution of veins, three samples of marble were chosen for comparison with the second marbling motif (DES SIK\_Povlja\_2) (Fig. 4). Two samples were of *Breccia di Sciro o di Settebasi* (Lat. *Marmor Scyreticum*), from Sciro Island in Greece. For the third sample, *Breccia dorata* (Italy) was selected.

## Bol

Church of St John and St Theodore<sup>15</sup>

Marbling wall decorations were preserved on the northern wall of the underground (substructure) chamber, next to the church of St John and St Theodore in Bol, later converted to a water cistern.<sup>16</sup> Modest imitations of marble panelling (*opus sectile marmoreum*) are also present in the frescoes of other early Christian churches on Brač Island.

14 MUSNAF (Museo di Storia Naturale dell'Accademia dei Fisiocritici) Online Catalogue (Catalogo completo-dettagliato della Collezione di Marmi Antichi), 2015.

15 Croatian; sv. Ivan i Teodor.

16 KOVAČIĆ 1986-87, 23-32.



Fig. 5. Remains of fresco decoration (north wall of the sub-structure), St John and St Theodore, Bol (photo: T. Borovac, B. Matulić)

The frescoes were covered to a large extent by a ribbed, barrel-vaulted cistern which was added at a later date.<sup>17</sup>

The decoration consists of two rows of rectangular panels surrounded by coloured bands (Fig. 5). The outer band was painted with crimson-brownish pigments. The inner bands, enveloping the central panel, were decorated with an imitation of light, white marble with a water-diluted touch of ochre. The matrix consists of grains, which are oval-shaped and of various, although similar, sizes. The marble veins are painted in red pigment, and in places accented with diluted blue pigment. The central panel consists of a bright ochre background, and was used to represent marble grains of roughly three different sizes. The veins separating marble grains were painted with a crimson pigment that, with the passage of time and in unfavourable conditions, became brownish.

Of the preserved fragments, two of the described faux marbling motifs were selected for comparison with real marble samples.

For the first sample (SIT\_Bol\_1), imitating light marble enveloped by reddish veins (Fig. 6), three marble samples were selected:



Fig. 6. Detail of SIT\_1 motif (St John and St Theodore, Bol) (photo: T. Borovac, B. Matulić)

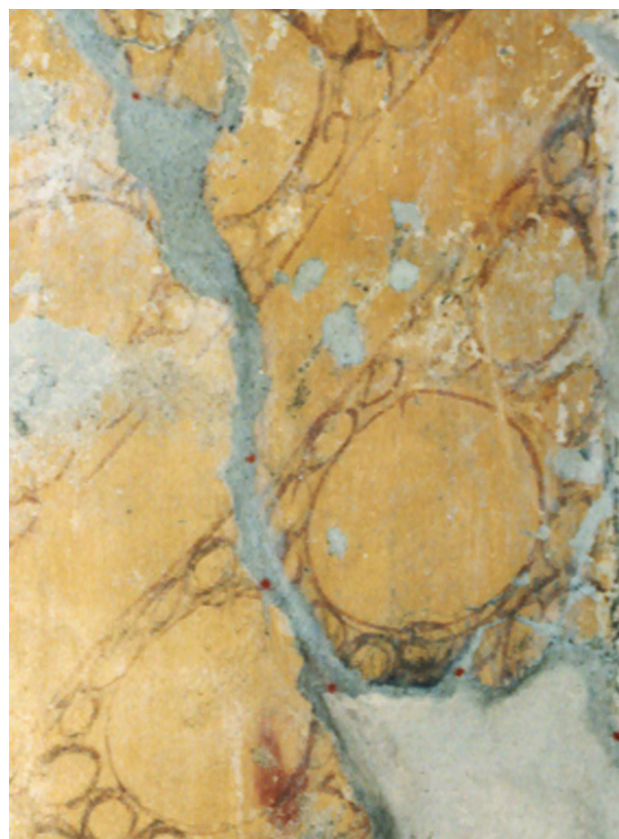


Fig. 7. Detail of SIT\_2 motif (St John and St Theodore, Bol) (photo: T. Borovac, B. Matulić)

The first is Breccia di Aleppo from Chios Island, Greece; the second is Pomarolo o Breccia di Arbe, from Rab Island, Croatia, while the third sample is Pavonaz-zetto, Phrygia, Asia Minor (Turkey).

For the second marbling motif (SIT\_Bol\_2) (Fig. 7) three samples of marble were selected for comparison. Two of the samples selected were variations of Marmo Tri-pontico o Occhio di pavone, var. pavonazza and rosa. The third sample selected was Breccia rossa appenninica (Italy).

17 KOVAČIĆ 1986-87, 23-32.

<i>Site</i>	<i>Geographical position</i>	<i>Faux marbling sample designation</i>	<i>Marble sample</i>	<i>Marble origin</i>
St John and St Theodore (substructure)	Bol Brač Island Splitsko-dalmatinska County	SIT_Bol_1	Breccia di Aleppo	Chios Island Greece
St John and St Theodore (substructure)	Bol Brač Island Splitsko-dalmatinska County	SIT_Bol_1	Pomarolo o Breccia di Arbe	Rab Island Croatia
St John and St Theodore (substructure)	Bol Brač Island Splitsko-dalmatinska County	SIT_Bol_1	Pavonazetto ( <i>Lat. Marmor Docimium, Marmor Synnadicum, Marmor Phrygium</i> )	Iscehisar Phrygia Asia Minor Turkey

Table 3. Comparison of SIT\_Bol\_1 motif with several marble samples from antique quarries

<i>Site</i>	<i>Geographical position</i>	<i>Faux marbling sample designation</i>	<i>Marble sample</i>	<i>Marble origin</i>
St John and St Theodore (substructure)	Bol Brač Island Splitsko-dalmatinska County	SIT_Bol_2	Marmo Tripontico o Occhio di pavone, var. pavonazza ( <i>Lat. Marmor Triponticum, Pneunomusium</i> )	Kutluca Izmit Bithynia Asia Minor Turkey
St John and St Theodore (substructure)	Bol Brač Island Splitsko-dalmatinska County	SIT_Bol_2	Marmo Tripontico o Occhio di pavone, var. rosa  ( <i>Lat. Marmor Triponticum, Pneunomusium</i> )	Kutluca Izmit Bithynia Asia Minor Turkey
St. John and Theodore (substructure)	Bol Brač Island Splitsko-dalmatinska County	SIT_Bol_2	Breccia rossa appenninica	La Spezia Liguria Italy

Table 4. Comparison of SIT\_Bol\_2 motif with several marble samples from antique quarries



Fig. 8. Remains of fresco painting (north wall of the Baptistery), St Lawrence, Lovrečina (photo: T. Borovac)

## Lovrečina

### Basilica of St Lawrence<sup>18</sup>

The Bay of Lovrečina is situated along the northern shore of Brač Island, approximately 2.2 km south-east from the village of Postira. The bay is important because of its complex and rich history and archaeological sites, which include the remains of a Roman *villa rustica* in the central part of the bay, and an Early Christian basilica, of St Lawrence, situated near the western slope of the high ground that surrounds the bay.<sup>19</sup>

The frescoes discovered in the early Christian baptistery from the 6<sup>th</sup> century, which was added as a northern annex to the church of St Lawrence, have been partially preserved at a height of about 20 cm above the ground level (Fig. 8).

Based on the conservation documentation and using a comparison with the example of faux marbling decoration found in the underground chamber in Bol, we can

presume that the rectangular fields above the greyish stripes were decorated with faux marbling depicting marble plates (Fig. 9). The remains of the fresco have to be subjected to conservation work and cleaning, and it was impossible to document the details of the marbling motif in its current condition.

## Episcopal complex in Salona

### Baptistery complex, east chamber

The Episcopal Complex is located in the northern part of the ancient Roman city of Salona, the present-day Solin. In the baptistery area of the complex (5-6<sup>th</sup> century CE), a small fragment of fresco decoration is still preserved, although its paint layer and mortar are exposed to various and intense dilapidating processes.<sup>20</sup> It is attached to the wall in the north-east corner of the east chamber, where the marbling motif has been painted by the application of red pigment on a light yellow or ochre background, representing marble grains and matrix (Fig. 10).

The only preserved motif from the fragment (DES EC\_Salona\_1) (Fig. 11) was used for comparison with marbles that were widely used for decorating public and religious buildings during Roman and Early Christian period. Three marble samples that possessed specific similarities with the marbling motif were selected for a comparison. The first was Marmo Tripontico o Occhio di pavone, var. pavonazza (Lat. *Marmor Triponticum, Pneunomusium*) from Asia Minor, the second Breccia di Herake, also from Asia Minor. Breccia corallina (Lat. *Marmor Sagarium*) was, among others, compared and selected as a third marble sample that could have been used as a possible source of inspiration.<sup>21</sup>



Fig. 9. Conservation documentation drawing depicting the remains of the fresco (north wall in the Baptistery), St Lawrence, Lovrečina (drawing: B. Matulić, Croatian Conservation Institute)

18 Croatian; sv. Lovre.

19 JELIČIĆ-RADONIĆ 1992, 133-150.

20 MARDEŠIĆ 2004, 238-240.

21 MUSNAF (Museo di Storia Naturale dell'Accademia dei Fisiocritici) Online Catalogue (Catalogo completo-dettagliato della Collezione di Marmi Antichi), [http://www.museofisiocritici.it/risultato\\_inv.asp?order=0](http://www.museofisiocritici.it/risultato_inv.asp?order=0)



Fig. 10. Remains of fresco painting with faux marbling motif in the east chamber near the Baptistery (Episcopal complex in Salona) (photo: T. Borovac)



Fig. 11. Detail of EC\_Salona\_1 motif (photo: T. Borovac)

Site	Geographical position	Faux marbling sample designation	Marble sample	Marble origin
Episcopal Complex in Salona	Salona City of Solin Splitsko-dalmatinska County	EC_Salona_1	Marmo Tripontico o Occhio di pavone, var. pavonazza (Lat. <i>Marmor Triponticum</i> , <i>Pneunomusium</i> )	Kutluca Izmit Bithynia Asia Minor Turkey
Episcopal Complex in Salona	Salona City of Solin Splitsko-dalmatinska County	EC_Salona_1	Breccia di Herake	Herake Izmit Bithynia Asia Minor Turkey
Episcopal Complex in Salona	Salona City of Solin Splitsko-dalmatinska County	EC_Salona_1	Breccia corallina (Lat. <i>Marmor Sagarium</i> )	Vežirhan Izmit Bithynia Asia Minor Turkey

Table 5. Comparison of EC\_Salona\_1 motif with several marble samples from antique quarries

**Vid (Narona)**

Church of St Vitus in Vid<sup>22</sup>

Today’s village of Vid was founded on the remains of the Roman settlement of Narona, near the delta of the Neretva river. It was part of the Roman province of Dalmatia. The Church of St Vitus is situated in the north-eastern part of the village. The contemporary church was built in the 16<sup>th</sup> century, over the remains of an older and bigger Early Christian basilica. The basilica was abandoned

simultaneously with the city of Narona in the 5<sup>th</sup> or 6<sup>th</sup> century, during the Slavic migrations in the area.<sup>23</sup>

During the archaeological excavations during the 1990s (led by Emilio Marin) in the northern annex of the Church of St Vitus an octagonal baptismal well was found (Fig. 12). After archaeological excavations and research, the baptismal well was conserved, documented and reburied. According to the discovered artefacts (coins), it is dated in the 5<sup>th</sup> century. The octagonal well has three stairs on opposite sides following north-south line. The complete interior, side walls and stairs were

22 Croatian; sv. Vid.

23 MARIN *et al.* 1999.



Fig. 12. Baptismal well decorated with the fresco with faux marbling motifs near the church of St Vitus (Vid) (source: MARIN *et al.* 1999)



Fig. 14. Detail of SV\_Vid\_1 motif (St Vitus, Vid) (photo: MARIN *et al.* 1999)



Fig. 13. Stairs in the baptismal well painted with faux marbling motifs (church of St Vitus, Vid) (source: MARIN *et al.* 1999)



Fig. 15. Detail of SV\_Vid\_2 motif (St Vitus, Vid) (photo: MARIN *et al.* 1999)



Fig. 16. Detail of SV\_Vid\_3 motif (St Vitus, Vid) (photo: MARIN *et al.* 1999)

<i>Site</i>	<i>Geographical position</i>	<i>Faux marbling sample designation</i>	<i>Marble sample</i>	<i>Marble origin</i>
St Vitus Church (baptismal well)	Vid Dubrovačko-neretvanska County	SV_Vid_1	Pavonazetto ( <i>Lat. Marmor phrygium, Synnadicum, Docimenium</i> )	Iscehisar Phrygia Asia Minor Turkey
St Vitus Church (baptismal well)	Vid Dubrovačko-neretvanska County	SV_Vid_1	Marmo Tripontico o Occhio di pavone, var. Rosa ( <i>Lat. Marmor Triponticum, Pneunomusium</i> )	Kutluca Izmit Bithynia Asia Minor Turkey

Table 6. Comparison of SV\_Vid\_1 motif with several marble samples from antique quarries

<i>Site</i>	<i>Geographical position</i>	<i>Faux marbling sample designation</i>	<i>Marble sample</i>	<i>Marble origin</i>
St Vitus Church (baptismal well)	Vid Dubrovačko-neretvanska County	SV_Vid_2	Breccia dorata Sample 1	Montagnola Tuscany Italy
St Vitus Church (baptismal well)	Vid Dubrovačko-neretvanska County	SV_Vid_2	Breccia dorata Sample 2	Apua Alps Lucca Italy

Table 7. Comparison of SV\_Vid\_2 motif with several marble samples from antique quarries

<i>Site</i>	<i>Geographical position</i>	<i>Faux marbling sample designation</i>	<i>Marble sample</i>	<i>Marble origin</i>
St Vitus Church (baptismal well)	Vid Dubrovačko-neretvanska County	SV_Vid_3	Marmo Caristio o Cipollino verde ( <i>Lat. Marmor Carystium, Marmor Styrium</i> )	Styra and Karystos Euboea Greece
St Vitus Church (baptismal well)	Vid Dubrovačko-neretvanska County	SV_Vid_3	Marmo Cipollino marino	Apua Alps Lucca Italy

Table 8. Comparison of SV\_Vid\_3 motif with several marble samples from antique quarries



Site	Geographical position	Faux marbling sample designation	Marble sample	Marble origin
St John the Baptist (baptistery)	Povlja Brač Island	SIK_Povlja_1	Lumachella rosa	Kairouan North Africa Tunisia
St John the Baptist (baptistery)	Povlja Brač Island	SIK_Povlja_2	Breccia di Sciro o di Settebasi (Lat. <i>Marmor Scyreticum</i> )	Sciro island Greece
St John and St Theodore (substructure)	Bol Brač Island	SIT_Bol_1	Pomarolo o Breccia di Arbe	Rab island Croatia
St John and St Theodore (substructure)	Bol Brač Island	SIT_Bol_2	Marmo Tripontico o Occhio di pavone, var. rosa	Kutluca , Izmit Bithynia Asia Minor Turkey
Episcopal Complex in Salona (baptistery, east chamber)	Salona City of Solin	EC_Salona_1	Breccia corallina (Lat. <i>Marmor Sagarium</i> )	Vezirhan, Izmit Bithynia Asia Minor Turkey
St Vitus Church (baptismal well)	Vid	SV_Vid_1	Pavonazetto (Lat. <i>Marmor Phrygium</i> )	Iscehisar Phrygia Asia Minor Turkey
St Vitus Church (baptismal well)	Vid	SV_Vid_2	Breccia dorata Sample 2	Apua Alps Lucca
St Vitus Church (baptismal well)	Vid	SV_Vid_3	Marmo Caristio o Cipollino verde (Lat. <i>Marmor Carystium</i> )	Styra and Karystos Euboea Greece

Table 9. Final selection of the marble samples with their faux marbling motif equivalents presented in the study

decorated with a painted imitation of different types of marble made in the fresco technique. It was possible to select samples of three different types of faux marbling.

The three stairs, descending from the top to the bottom of the well, were decorated with marbling motif depicting a composite marble with numerous irregular horizontal layers in different shades of black, blue and green (Fig. 13). The panel on the left side was decorated with marbling of various-sized oval grains with stylised peacock eyes in red and green pigment, divided by a net of thin black veins. The panel on the right side was decorated with irregular, oval-shaped dark yellow grains, divided by a net of purplish-black veins.

Three of the motifs were preserved well enough for them to be used in comparative research.

Each motif was compared with several types of marbles used in antiquity. For a closer selection two samples of marble per motif were introduced. The first

motif (DES SV\_Vid\_1) (Fig. 14) was compared with Pavonazetto (Lat. *Marmor phrygium*, *Synnadicum*, *Docimanium*) (Asia Minor), and Marmo Tripontico o Occhio di pavone, var. Rosa (Lat. *Marmor Triponticum*, *Pneunomusium*) also from Asia Minor.

The second motif selected (DES SV\_Vid\_2) (Fig. 15) was compared with two samples of Breccia dorata originating from two different geographical locations within the same country (Italy).

The third motif (DES SV\_Vid\_3) (Fig. 16) was compared with two types of Marmo Cipollino, the first being Marmo Caristio o Cipollino verde, originating from Euboea, Greece, the second being Marmo Cipollino marino from Lucca, Italy.





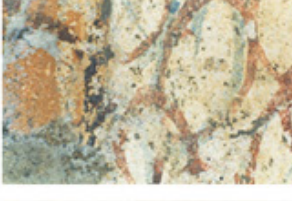



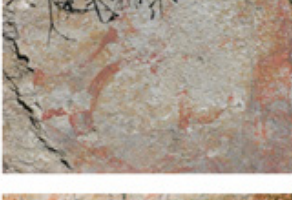
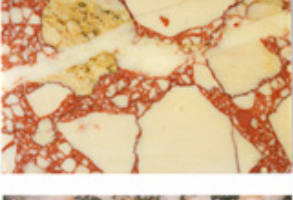

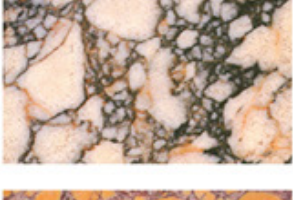
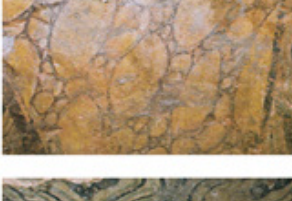
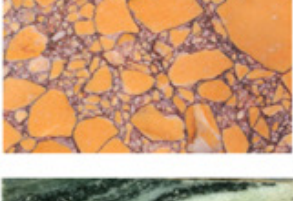
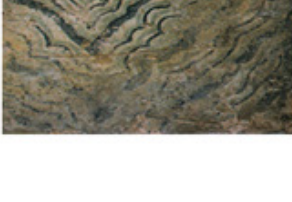

<i>Faux marbling motif</i>	<i>Faux marbling motif designation</i>	<i>Marble sample</i>	<i>Marble sample name and origin</i>
	SIK_Povlja_1		Lumachella rosa Kairouan North Africa Tunisia
	SIK_Povlja_2		Breccia di Sciro o di Settebasi (lat. Marmor Scyreticum) Sciro Island Greece
	SIT_Bol_1		Pomarolo o Breccia di Arbe Rab Island Croatia
	SIT_Bol_2		Marmo Tripontico o Occhio di pavone, var. rosa Bithynia Asia Minor Turkey
	EC_Salona_1		Breccia corallina (lat. Marmor Sagarium) Bithynia Asia Minor Turkey
	SV_Vid_1		Pavonazetto (lat. Marmor Phrygium) Phrygia Asia Minor Turkey
	SV_Vid_2		Breccia dorata Sample 2 Apua Alps Lucca Italy
	SV_Vid_3		Marmo Caristio o Cipollino verde (lat. Marmor Carystium) Styra and Karystos Greece

Fig. 17. Faux marbling motifs overview with marble samples that were used as probable templates, final selection (sources: MUSNAE, Università dei Marmorari di Roma, B. Matulić, T. Borovac, E. Marin)

## Conclusion

Within the usual symbolism of art forms, Christianity brought great and radical artistic novelties that were to represent the collective consciousness. The frequent use of faux marbling decoration in the early Christian period is not necessarily the result of a lack of resources, but part of a conscious choice of visual language. However, it is a fact that the production, distribution and demand for all types of marble were drastically reduced in that period. All of this resulted in the intensified use of the faux marbling technique during the Early Christian period in Central and South Dalmatia.

According to comparison of the frescoes and natural marble presented, the final selection in the study identified following marbles that were used as templates for executing faux marbling motifs in the cases presented: Occhio di pavone, Pavonazetto, Breccia Coralina, Breccia dorata, Breccia di Sciro, Breccia di Arbe, Lumachella rosa, Cipollino verde<sup>24</sup> (Fig. 17).

Difficulties in the study were mainly associated with identifying and relating true marble and stone samples with somewhat stylised faux marbling artistic interpretations.

Early Christian artisans and artists might have seen most of the natural marbles as part of already ancient decorations that were displayed in their nearby environment, and used them, although more or less stylised, in their work. It is also possible that they might have reused already existing examples of faux marbling wall decorations as inspiration, adding their own unique interpretation and form to the existing palette of motifs.

## BIBLIOGRAPHY

- JELIČIĆ-RADONIĆ J. 1992: "Ranokršćanske freske u Lovrečini na Braču", PPUD 32, Split, 133-150.
- KOVAČIĆ V. 1986-87: "Kasnoantička cisterna u Bolu na Braču", PPUD 26, Split, 23-32.
- MARASOVIĆ K., MATETIĆ POLJAK D. 2010: "Upotreba dekorativnog kamena u Dioklecijanovoj palači u Splitu", *Histria Antiqua* 19, Pula.
- MARDEŠIĆ J., CHEVALIER P. 2004: "Revizijska iskopavanja u Saloni – Oratorij A", *Hrvatski arheološki godišnjak*, (2004.), 1, 238-240.
- MARIN E. *et al.* 1999: *Sveti Vid*, Arheološki muzej, Split
- MARIN E. 2012: "Moguće pomorske komunikacije starokršćanske Salone", *Histria Antiqua* 21, 123-128.
- MATULIĆ B. 2012: *Temeljni pojmovi konzervacije-restauracije zidnih slika i mozaika*, Naklada Bošković, Split.
- MATULIĆ B., BOROVIĆ T. 2002-05 (unpublished): *Conservation-restoration works in parish church of St. John the Baptist in Povlja*. Croatian Conservation Institute, Split
- PARKER A. J. 1992: *Ancient Shipwrecks of the Mediterranean & the Roman Provinces*, *Bar International Series*, Oxford, 580.
- POTTER D. S. 2009 (ed): *A Companion to the Roman Empire*, Wiley-Blackwell.
- PRANTL M. 2011: "Diocletian's Edict on Maximum Prices of 301 AD, A fragment found in Aigeira", *historia.scribere* 3 (2011), 359-398.
- VRŠALOVIĆ D. 1974: *Istraživanja i zaštita podmorskih arheoloških spomenika u SR Hrvatskoj*, Zagreb.
- MUSNAF (Museo di Storia Naturale dell'Accademia dei Fisiocritici): *Online Catalogue (Catalogo completo dettagliato della Collezione di Marmi Antichi)*, [http://www.museofisiocritici.it/risultato\\_inv.asp?order=0](http://www.museofisiocritici.it/risultato_inv.asp?order=0), 2005/16.
- Università dei Marmorari di Roma (Elenco Campionario Marmi): *Online catalogue*, <http://www.universitadeimarmorari.it/campionario.html>, 2015.

24 Most of the marble samples used in the study are part of the MUSNAF (Museo di Storia Naturale dell'Accademia dei Fisiocritici) Online Catalogue (Catalogo completo-dettagliato della Collezione di Marmi Antichi), [http://www.museofisiocritici.it/risultato\\_inv.asp?order=0](http://www.museofisiocritici.it/risultato_inv.asp?order=0), and Università dei Marmorari di Roma (Elenco Campionario Marmi – Online catalogue), <http://www.universitadeimarmorari.it/campionario.html>

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