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Staklo u izradi mozaika

Arheološka istraživanja na prostoru Hrvatske u proteklih su stotinjak godina iznjedrila brojne mozaike. Provođena su pokusna istraživanja, revizijska istraživanja, sustavna arheološka istraživanja, zaštitna istraživanja, geoistraživanja te konzervacija i restauracija. Objavljeni su brojni radovi o mozaicima, bilo kao samostalni radovi ili monografije, bilo kao objavljeni samostalni nalazi. To se posebno odnosi na manje fragmente te nalaze tesera. U razdoblju od 2004. do 2014. godine objavljeni su rezultati arheoloških istraživanja u Hrvatskom arheološkom godišnjaku. U tom je razdoblju na prostoru Hrvatske istraženo mnogo lokaliteta na kojima su otkriveni mozaici, fragmenti mozaika, tesere ili kockice mozaika, staklene kockice i podloge za mozaik. U tom razdoblju obavljena je i sanacija te konzervacija poznatih mozaika (podni mozaik apside u Novalji, mozaik u cisterni na Bribirskoj glavici, podni mozaik u termama na Visu te podni mozaik iz Narone u današnjem Vidu). Mozaička dekoracija javlja se na gotovo cijelom području istočne obale Jadrana. Gotovo sve građevine nastale ili adaptirane u kasnom rimskom ili ranobizantskom razdoblju imaju mozaičku dekoraciju kao dio unutarnjeg uređenja profane i sakralne arhitekture, s time da će više biti zastupljena u sakralnoj arhitekturi.

Ključne riječi: mozaik, staklena pasta, staklo, Rimsko Carstvo.

Glass in the making of mosaics

Archaeological excavations conducted in Croatia during the last hundred or so years have revealed numerous mosaics. Shovel test pits, review excavations and systematic archaeological excavations have been carried out, with rescue excavations, geo-investigations and conservation and restoration operations. Numerous papers and books or even just mentions of finds have been published. This latter particularly relates to smallish fragments and finds of tesserae. In the 2004 to 2014 period the results of archaeological excavations in Croatia were published in the Croatian Archaeological Annual. In this period, in the area of Croatia, many sites were investigated, revealing mosaics, fragmentary mosaics, tesserae, glass tesserae and mosaic bases. The rehabilitation and conservation of well-known mosaics were carried out (floor mosaic of the apse in Novalja, mosaic in a cistern on Bribirska glavica, floor mosaic in baths on Vis and floor mosaic from Narona, today's Vid).

Mosaic decoration appears over almost the whole of the eastern shores of the Adriatic. Almost all buildings either built or repurposed in the late Roman and early Byzantine period had mosaic decorations as part of the arrangement and decoration of both secular and sacred architecture, although it was more often to be found in buildings with religious purposes.

Keywords: *mosaic, glass paste, glass, Roman Empire.*

Tehnika ukrašavanja mozaikom umjetnička je vrsta bliska slikarstvu u kojoj se određeni motivi i polikromija postižu nizanjem sitnih raznobojnih elemenata, četverokutnog, nepravilnog i izduženog oblika. Taj posebni način izražavanja, čija je namjena bila da goleme arhitektonske površine, kao što su podovi, zidovi i svodovi, pokrije čvrstim i obojenim komadićima mramora, kamena, glazirane keramike ili stakla, vodi porijeklo s Istoka. Najranije oko 4. st. pr. Kr. javlja se u Mezopotamiji i Babilonu, a preko Sirije i Male Azije mozaik se širio u sve zemlje zahvaćene antičkom kulturom i civilizacijom. Već u Mezopotamiji, u Varki i Babilonu, poznati su ne samo ornamentalni nego i figuralni prikazi izvedeni u takvoj vrsti tehnike. U Grčkoj, Maloj Aziji i Siciliji ukrašavanje je izvedeno tehnikom neobrađenih oblutaka koju su poslije Rimljani nazivali *opus barbaricum*. Teme su mitološke scene, prizori lova te biljni i geometrijski ukrasi često po uzoru na oslikane vaze.¹ Na Sredozemlju se ta tehnika dugo zadržala, o čemu svjedoče mozaici s Delosa iz sredine 2. st. pr. Kr.

No visoka umjetnička razina prvih dosad poznatih djela navodi na pretpostavku da su i ranije stvarana djela u toj tehnici. Početkom 2. st. pr. Kr. zapaža se uočljiva promjena grčke tehnike mozaika. Dolazi do uporabe tehnike *opus tessellatum*, koja površini mozaika daje uglađeniji i kompaktniji izgled, a isto tako je omogućavala da se predmeti finije izraze. Također se javlja i tehnika *opus vermiculatum*, koja se upotrebljavala za izradu amblema.

Upotrebom rezanih kockica započinje novo razdoblje u razvoju mozaika, kada materijal i dalje ostaje prirodni kamen, posebice mramor, zbog lake obradbe te punine boje (Cambi 1995, 595). Tijekom 3. st. nastaju poznata mozaička središta, odnosno škole, a javljaju se i prva imena majstora, poput Sosa u Pergamu, Hephaistona i Asklepiadesa iz Fenicije. U tom se razdoblju pojavljuju i dvije različite mozaičke tehnike, *opus tessellatum* i *opus vermiculatum*.

U kasno republikansko doba druge pol. 2. st. pr. Kr. prenosi se mozaička umjetnost u Rim pa je rimski mozaik u odnosu na grčko-helenističke mozaike podčinjen prostoru.

Podni (*lithostroton, pavementum*) i zidni mozaici razlikuju se u izvedbi od kasne antike, a posebice od srednjeg vijeka, kada se podni mozaik izrađuje i dalje od kamenih kockica, a zidni se izvodi pretež-

The technique of embellishment with mosaics is an artistic genre that is close to painting, in which certain subjects or motifs and polychromy are created with the sequencing of tiny, varicoloured elements, square or irregular or elongated in shape. This special manner of expression, the purpose of which was to cover vast architectural surfaces, like floors, walls and vaults with small solid and coloured pieces of marble, stone, glazed ceramic ware or glass, derives from the east. The earliest it appears is in about the 4th century BC in Mesopotamia and Babylon, and via Syria and Asia Minor it spread to all the lands covered by ancient culture and civilisation. In Mesopotamia, Varka and Babylon, not only ornamental but also figural representations that were done in this kind of technique are known. In Greece, Asia Minor and Sicily, decoration was done with the technique using unworked pebbles, which the Romans were later to call *opus barbaricum*. The themes are scenes from myth, scenes of hunting, plant and geometrical decorations often modelled on the decorations of painted vases.¹ In the Mediterranean this technique held its place long, as we can see from the Delos mosaics of the mid-2nd century BC.

But the artistic perfection of the first works known to date prompts the assumption that works must have been created earlier in this technique as well. At the beginning of the 2nd century BC, a clear change in the Greek mosaic technique can be observed. The use of the *opus tessellatum* technique came in, which gave the surface of a mosaic a smoother and more contained appearance, and also enabled objects to be expressed with greater finesse. The *opus vermiculatum* also appeared, and as has already been said, was used for the making of emblems.

In the period of the late Republic, from the second half of the 2nd century BC, the art of the mosaic was conveyed to Rome, and Roman mosaic art, as compared to Greek and Hellenistic, was subordinated to the space.

Floor (*lithostroton, pavementum*) and wall mosaics differ in the way they are made from Late Antiquity and particularly from the Middle Ages, when floor mosaics were still made of stone tesserae and wall mainly from glass pieces.² The technique

¹ Antički mozaici 1973, p. 14.

² Mano-Zisi 1964, p. 500; Oakeshott 1967, p. 9; Buzov 1987, p. 380.

¹ Antički mozaici 1973, str. 14.

no od staklenih.² Tehnika mozaika ipak doseže svoj puni razvoj u Grčkoj u razdoblju helenizma³ te u Rimu i Bizantu, a poznato je i tehničko savršenstvo u izvedbi.⁴

Tijekom razvoja mozaika postojale su različite tendencije – čas prema dekorativnosti, čas prema ilustrativnoj figurativnosti, iluzionističkoj realnosti ili pak apstraktnoj stilizaciji. Mozaik je upotrebljavan povremeno i za vanjsku dekoraciju (fontana u Pompejima) i na pročeljima građevina (pročelje bazilike u Poreču, palače i mošeje u doba Omejevića u Siriji, crkva Martorana u Palermu, Sv. Marko u Veneciji), što ide u prilog orijentalnom ukusu. U mozaičkim prikazima sačuvan je u svim razdobljima dvodimenzionalni tretman.

Podni mozaik sačuvao je u osnovi ideju skamenjenog tepiha, kompozicijom tekstilne strukture, motivima preuzetim s tkanina i okvirnom bordurom. U takav okvir ubacuju se figuralne slike i emblemi. U zidnom mozaiku funkcionalno raščlanjivanje arhitektonskih površina i odvajanje figuralnih kompozicija postiže se trakama lezena, tenija, sokla i dr., zapravo također motivima preuzetim iz tekstila (geometrijske i biljne šare).

Na otoku Delosu, u Korintu i Rimu prethodnica mozaika razvidna je u tehnici inkrustacije raznovrsnih kamenih ploča kako na podu tako i na soklu te pilastrima zidova. Takve pločice sitnijih i slobodnijih oblika pripadaju tehnici *opus sectile*, dok je u vrijeme Aleksandra Severa uporaba raskošnijeg porfira nazvana i *opus Alexandrinum*.⁵

Helenizam je razvio mozaik do sitnih portativnih slika s prikazima prirode, *genrea* te portreta, a s druge strane do monumentalnih kompozicija iz mitologije i povijesti. Poznato i snažno mozaičko središte bilo je u Antiohiji. S helenističkog istoka tehnika mozaika prenesena je u Italiju, gdje su otkriveni značajni mozaici iz 2. i 1. st. pr. Kr., naročito u Pompejima. Mozaik „Aleksandrova bitka“ iz Pompeja⁶ te portret Vergilija iz Tunisa⁷ karakteristični su primjerci tih smjerova u rimsko doba. Prema potpisima koji se nalaze na nekim mozaicima možemo pretpostaviti da su većinu njih radili Grci.

of mosaic reached the acme of its development in Greek in the Hellenistic period³ and in Rome and Byzantium, and the technical perfection of the workmanship is well known.⁴

During the development of the mosaic there were various tendencies – sometimes in the direction of decorativeness, sometimes tending to figurativeness and illusionist reality, then again abstract stylisation. Mosaic was used occasionally for outside decorations (the fountain in Pompeii) and on the facades of buildings (the outside façade of the Poreč basilica, palaces and mosques in the Umayyad period in Syria, the Martorana church in Palermo, St Mark's in Venice) all speaking in favour of oriental taste. The two dimensional approach was kept in all periods in mosaic representations.

The floor mosaic retained in outlines the idea of the petrified carpet with a composition of a textile structure, motifs being taken from fabrics with a framing border. Figures and emblems are then inserted inside this framework. In a wall mosaic, functional articulation of the architectural surfaces and the separation of figural compositions is done with the bands of lesenes, teniae, plinth courses and other things, in essence also taken from textiles (geometrical and plant patterns).

On the island of Delos, in Corinth and Rome, the forerunner of the mosaic can be seen to stand out in the technique of incrustation of various stone panels both on the floor and the plinth course, and on the pilasters of the walls. Such panels, of smaller and freer forms, provide the technique of *opus sectile*, while at the time of Alexander Severus this use of the more luxurious porphyry was called *opus Alexandrinum*.⁵

Hellenism developed the mosaic as far as tiny portable images with depictions of nature, genre scenes and portraits, and on the other hand as far as monumental compositions from mythology and history. A powerful mosaic centre is known to have existed in Antioch. From the Hellenistic east the technique of the mosaic was transferred to Italy, where significant mosaics of the 1st and 2nd century BC have been discovered, particularly in Pompeii. The Alexander's Battle mosaic in Pompeii⁶ and

² Mano-Zisi 1964, str. 500; Oakeshott 1967, str. 9; Buzov 1987, str. 380.

³ Bruneau 1976, str. 16-25.

⁴ Mano-Zisi 1964, str. 500.

⁵ Mano-Zisi 1964, str. 501.

⁶ Avi Yonah 1975, str. 22-24; Stern 1976, str. 15; Darmon 1976, str. 31; Garčević 2006, str. 27, sl. 10.

⁷ Buzov 1992, str. 95; Garčević 2006, str. 74, sl. 49.

³ Bruneau 1976, pp. 16-25.

⁴ Mano-Zisi 1964, p. 500.

⁵ Mano-Zisi 1964, p. 501.

⁶ Avi Yonah 1975, pp. 22-24; Stern 1976, p. 15; Darmon 1976, p. 31; Garčević 2006, p. 27, Fig. 10.

Tako je mozaik zauzeo značajno mjesto i u rimskoj umjetnosti. Tijekom prvih stoljeća Carstva mozaička tehnika bila je poznata u cijelom Rimskom Carstvu.

Uskoro su se pojavila različita mozaička središta na velikom prostoru, koji se protezao od sjeverne Afrike do Britanije i od Portugala do granica Perzijskog Carstva.⁸ Kao izrazita rimska suprotnost helenističkoj polikromiji pojavljuje se sklonost monokromizmu (prikazi obrađeni crno-bijelo, s istaknutim konturama figura). U 2. st. vraća se tendencija prema boji i velikoj figuralnoj kompoziciji s bordurama. Međutim, helenistička tradicija polikromnog mozaika produžuje se u provincijama oko Mediterana, što se posebno jasno vidi u provinciji Africi, gdje je polikromni mozaik neprekidno cvjetao od 2. do 6. stoljeća. Mozaička umjetnost dosegla je svoj puni razvoj u sjevernoj Africi tek polovicom 2. st. po. Kr., u razdoblju društvenog preporoda i prosperiteta, kada se razvila intenzivna umjetnička aktivnost.⁹ Iz tog i kasnijeg vremena u Africi su, a posebice u Tunisu, očuvani mnogobrojni rimski mozaici.¹⁰ Tekstovi na mozaicima pridonose tome da naslikane scene ostavljaju dojam stvarnosti.

Uporaba staklenog mozaika proširila se na oblaganje fontana i bazena. Mozaici su prekrivali sve slobodne arhitektonske elemente, uključujući i arhitrave. Osim što su vodootporne, takve staklene plohe pogodne su i za oblaganje ovalnih oblika (stupova, fontana i sl.). Iako se razvilo i zidno slikarstvo, mozaik se zbog svojih tehnoloških prednosti više koristio, posebno u termama (2. i 3. st.). Jedan od primjera uporabe višebojnih smalta pronađen je u *Pallazzo Imperiale* u Ostiji (3. st.), a sada se nalazi u Vatikanskim muzejima.¹¹ U nadsvođenoj niši prikazan je Silvan sa psom, između stabala na tamnoplavoj pozadini. Takva pozadina pojavit će se u mauzoleju Gale Placidije u Ravenni. Slične mozaike nalazimo i u Trieru te na području današnje Švicarske i Španjolske.

Primjena umjetničke tehnike uz uporabu tanko rezanih vapnenaca, različitih vrsta mramora (*pavonazzetto*, *cipollino*, *giallo* i *rosso antico*) i staklene paste doživjet će svoju kulminaciju u bazilici Junija Basa u Rimu. Dva mozaička panela načinjena godi-

the portrait of Virgil from Tunis⁷ are characteristic specimens of these trends in the Roman period. From some of the signatures on mosaics, we can presume that most of them were done by Greeks. And so the mosaic occupied an important place in Roman art. During the first centuries of the Empire, mosaic technique was known wherever Roman law ran.

Soon various different mosaic centres were to appear over a wide area, stretching from northern Africa to Britain, from Portugal to the borders of the Persian Empire.⁸ In marked contrast to the colourism of Hellenistic art, Roman taste showed a fondness for the monochrome (depictions worked in black and white with accentuated contours to the figures). In the 2nd century the tendency for colour and for large figural compositions with borders came back. However, the Hellenistic tradition of the polychrome mosaic prolonged its life in the provinces around the Mediterranean, particularly obviously in Africa, where the polychrome mosaic flowered without pause from the 2nd to the 6th century. Mosaic art reached its full development in North Africa no earlier than the 2nd century, in a period of social renaissance and prosperity, when a vigorous artistic activity developed.⁹ From this time and that which ensued in Africa, particularly in Tunis, many Roman mosaics have survived.¹⁰ The texts on the mosaics give the painted scenes an even greater impression of reality.

The use of glass mosaics spread to the lining of fountains and pools. Mosaics covered all the available architectural elements, including the architraves. Such glass surfaces are not only impermeable but also suitable for the cladding of oval shapes (pillars and fountains and suchlike). Although mural art also developed, the mosaic, because of its technical advantages, was used more, especially in *thermae* (2nd and 3rd century). One of the examples of the use of polychrome *smalti* was found in *Pallazzo Imperiale* in Ostia (3rd century), now to be seen in the Vatican Museums.¹¹ In a vaulted niche we can see Silvanus with a dog, in the midst of trees against a dark blue background. This kind of background would appear in the mausoleum of Galla Placidia in

⁸ Blanchard 1976, str. 42-55; Barral i Altet 1976, str. 56-69; Balmelle 1976, str. 70-75.

⁹ Antički mozaici 1973.

¹⁰ Corpus 1973; Corpus 1976; Ennaïfer 1976.

¹¹ Garčević 2006, sl. 50.

⁷ Buzov 1992, p. 95; Garčević 2006, p. 74, Fig. 49.

⁸ Blanchard 1976, pp. 42-55; Barral and Altet 1976, pp. 56-69; Balmelle 1976, pp. 70-75.

⁹ Antički mozaici 1973.

¹⁰ Corpus 1973; Corpus 1976; Ennaïfer 1976.

¹¹ Garčević 2006, Fig. 50.

ne 331. u tehnici intarzije (danas u *Museo nazionale romano – Palazzo Massimo alle Terme*). Na većem panelu, s prikazom Otmica nimfa, kombinacija i način korištenja materijala dovedeni su do savršenstva (*Museo nazionale romano - Palazzo Massimo alle Terme*, 2012, str. 198-199, 304-305). Dinamična kompozicija izvedena je od pomno odabranih različitih komada mramora, rezane staklene paste i bisera. Na drugom panelu prikazan je konzul Junije (*Museo nazionale romano – Palazzo Massimo alle Terme*, 2012, 196-197, 306-307) u bigi s četveročlanom konjaničkom pratnjom u pozadini (ceremonijalni majstori za četiri arenske discipline). Riječ je o pompoznoj sceni iz arene, smirene i uravnotežene kompozicije; glave figura prikazane su *en face*, a konjske u profilu. Upotrijebljene su različite vrste mramora i rezane staklene paste (crvena, tirkizna, zelena) na tamnozelenoj i svijetlozelenoj pozadini (*alpe verde, serpentin*) s uzdignutim rubom (okvir) od istog materijala.

Na Levantu, a riječ je o regiji uz obalu istočnoga Sredozemlja između Turske (sjever) i Egipta (jug),¹² cvala je ekonomija temeljena na zemljoradnji, zanatstvu, trgovini i pomorstvu. (Danas su to dijelovi država Turske, Sirije, Libanona, Izraela, Palestine i Jordana.) U Tiru je bila jaka tekstilna proizvodnja, u Gerasi lončarstvo i keramika, a u Sidonu staklarstvo. Valja istaknuti da se osim čistim puhanjem staklo (1. st.) počelo oblikovati i puhanjem u kalup, na način da se staklena masa ulijeva u “tanke stijenke”.¹³ Stoga se na mozaicima javljaju komadići obojenog rezanog stakla, kao nadopuna za intenzivnije boje kojih nema u mramoru.¹⁴ Zanimljivo je da je tijekom arheoloških istraživanja od 1932. do 1939. godine otkriveno oko 300 mozaika. Veliki figuralni panel iz Louvrea s prikazom Parisova suda (115. g.) realistični je amblem s primjesom naturalizma.¹⁵ Mozaik je izveden od sitnih tesera u tehnici *opus vermiculatum* s mitološkom tematikom, s pikturnim obilježjima te naturalističkom florealnom bordurom sličnom tepihu ili tapiseriji. Upotreba sitnih tesera od prirodnog materijala (vapnenac i višebojni mramor), uz dodatak staklenih tesera (tirkiznih, zelenih i dr.) dovedena je do savršenstva. Na panelu je prikazan Dioniz koji s podignutim peharom nazdravlja Herkulu. Širokom spektru tesera

Ravenna. We can find similar mosaics in Trier and in today’s Switzerland and Spain.

The use of artistic techniques with the use of thinly cut limestone, various kinds of marble (*pavonazetto, cipollino, giallo* and *rosso antico*) and glass paste would know its culmination in the Basilica of Junius Bassus in Rome. Two mosaic panels made in 331 in the technique of inlay are today in the Museo nazionale romano – Palazzo Massimo alle Terme). In the bigger panel, *Rape of Hylas by the Nymphs*, the combination of materials and the use of them have reached a peak of perfection (Museo nazionale romano - Palazzo Massimo alle Terme, 2012, pp. 198-199, 304-305). The dynamic composition is made of various carefully selected pieces of marble, cut glass paste and pearls. Shown in the second panel is Consul Junius (Museo nazionale romano – Palazzo Massimo alle Terme, 2012, 196-197, 306-307) in a *biga* or two-horse chariot with a four-man equestrian escort in the background (masters of ceremony for four arena disciplines). This was a very grand scene from an arena, with a calm and balanced composition, the heads of the figures shown face-on, and the equine heads in profile. Various kinds of marble and cut glass paste were used (red, turquoise and green) on a dark and light green background (*alpe verde, serpentine*) with a raised edge (frame) of the same material.

In the Levant, a whole region on the coast of the eastern Mediterranean, located between Turkey to the north and Egypt to the south,¹² there was a flourishing economy based on agriculture, artisan trades, commerce and seafaring. Today, this area comprises parts of Turkey, Syria, Israel, Lebanon, Palestine and Jordan. In Tyre there was a strong production of fabric, in Gerasa, pottery and ceramics, and in Sidon, glassmaking. It is worth pointing out that apart from pure glass blowing (1st century), the technique of blowing into a mould began to be used, the molten glass thus pouring into thin walls.¹³ Hence in mosaics little pieces of cut coloured glass appeared as supplements for the vivid colours that did not occur in marble.¹⁴ It is interesting that during archaeological research between 1932 and 1939, some 300 mosaics were revealed. Large figural panel from the Louvre with a depiction of the Judgement of Paris (AD 115) is a realistic emblem with an admixture of

¹² Gaube 1999, str. 7.

¹³ Kochav 1995, str. 68.

¹⁴ Garčević 2009, str. 63.

¹⁵ Smith 2000, tekst ispod slike 12.

¹² Gaube 1999, p. 7.

¹³ Kochav 1995, p. 68.

¹⁴ Garčević 2009, p. 63.

pastelnih tonova od prirodnih materijala (vapnenca i mramora) pridodana je uporaba staklenih tesera, crvenih, plavih, tirkiznih, zelenkastih, kao i glaziranih žutih te crvenkastog okera.¹⁶ Gustoća tesera, koja je uz ostalo i jedno od mjerila kvalitete mozaika, kod antihijskih mozaika iz 2. i 3. st. je obilata (na licima i sl.).¹⁷ Helenistički utjecaj vidljiv je i na podnom mozaika iz Kuće kalendara (115. g.). Osim poprsja Godišnjih doba s grčkim imenima na crno-plavoj pozadini u kutovima kvadrata, mozaik prikazuje i mitološku scenu između Oceana i Tetije koji su okruženi morskim stvorenjima. Dijelovi mozaika - pozadina i draperija koji dočaravaju maringinski ugođaj - izvedeni su od sitnih plavih i zelenih staklenih tesera.¹⁸ Zanimljivo je napomenuti da gustoća tesera iznosi do 380 dm², 440 dm².

Veliki panel s realističnim prikazom mitološko-marinske scene Trijumfa Neptuna i Amfitrite (325. g.) iz Koudiat Atije (Alžir), danas u muzeju u Louvreu,¹⁹ s dodatkom simbola, dobar je primjer sjevernoafričke škole. Mozaik je izveden od prirodnih materijala bogatog kolorita, kao kombinacija dvaju stilova – linearnog u cik-cak linijama koje staklenim tirkiznim i zelenkastim teserama oponašaju vodu (slično nalazimo u Piazza Armerina i u Akvileji), kao latentnog kontrasta toplom inkarnatu figura.

Na području sjeverne Afrike (zemlje Magreba i Libija) otkriveno je oko 2000 mozaika,²⁰ a izvedeni su uglavnom od višebojnih komadića mramora, kamena i staklene paste. Afrički stil imat će velik utjecaj na Piazza Armerina, carski patronat u Konstantinovoj palači na Eskvilinu, a pojavit će se i na svodovima Sv. Konstance u Rimu, u Hispaniji, u Galiji i na Jadranu, kao i u Teodorovoj bazilici u Akvileji početkom 4. st.²¹

Motivi Godišnjih doba na kojima je razvidan sjevernoafrički utjecaj javljaju se u rimskoj vili u Rabaçalu (Penela, Portugal). Poprsja Godišnjih doba izvedena su sitnijim raznobojnim teserama od prirodnih materijala i staklene paste. Glave su okićene simboličnim atributima – zima artičokom i drvetom, proljeće cvijećem, ljeto sočnim voćem te jesen grožđem. Sličan umjetnički dojam prisutan je i u trikliniju, u kojemu se, uz geometrijske

naturalism.¹⁵ The mosaic is made from very small tesserae in *opus vermiculatum* with a mythological theme and pictorial characteristics, as well as with a naturalistic floral border similar to that in a carpet or tapestry. The use of small tesserae of natural materials (limestone and polychrome marble) with the addition of glass tesserae (turquoise, green and so on) is brought to a peak of perfection in a panel with a depiction of Dionysus who with raised goblet toasts Heracles, who quaffs thirstily while kneeling. Added to a wide spectrum of tesserae in pastel tones of natural materials (limestone and marble) are glass tesserae in red, blue, turquoise, green and glazed yellows and reddish ochre.¹⁶ The tessera count per unit of area, which is one of the ways of gauging the quality of mosaics, is very great in Antioch mosaics of the 2nd and 3rd centuries (on faces and so on).¹⁷ The Hellenistic influence is visible in the floor mosaic of the House of the Calendar (AD 115). By busts of the seasons with Greek names on a blue-black background in the corners of the square, the mosaic continues with a mythological scene of Oceanus and Tethys, surrounded by marine creatures. Parts of the mosaic – the background and the drapery, conjure up the marine mood and are made out of very small blue and green glass tesserae.¹⁸ It is worth mentioning that the tessera count is up to 380 per dm², 440 per dm².

A great panel with a marine mythological scene, the Triumph of Neptune and Amphitrite (325) from Koudiat Atia (Algeria) today in the museum of the Louvre¹⁹, a realistic depiction with the addition of symbolism, is a good example of the North African school. The mosaic is made out of natural materials rich in colour and is a combination of two styles – the linear in zigzag lines that with turquoise and greenish glass tesserae imitate water (something similar can be found in Piazza Armerina and in Aquileia) as contrast to the warm flesh tones of the figures

In North Africa – the Maghreb and Libya – about 2000 mosaics have been discovered, made on the whole of multicoloured marble, stone and glass paste.²⁰ The African style was to have a big influence on Piazza Armerina, the imperial patronate in

¹⁶ Dauphin 1997, str. 13.

¹⁷ Dauphin 1997, str. 13.

¹⁸ Smith 2000, str. 119-120.

¹⁹ Smith 2000, str. 128.

²⁰ Smith 2000, str. 124.

²¹ Smith 2000, str. 130.

¹⁵ Smith 2000, wording to fig. 12.

¹⁶ Dauphin 1997, p. 13.

¹⁷ Dauphin 1997, p. 13.

¹⁸ Smith 2000, pp. 119-120.

¹⁹ Smith 2000, p. 128.

²⁰ Smith 2000, p. 124

uzorke (kvadrate, krugove i Salamonove čvorove), pojavljuju i cvjetni motivi koji su izrađeni od finih vapnenih i staklenih tesera plavičastih i zelenkastih tonova.

U 3. st. prevladava okvirna ornamentalna kompozicija, a figuralna kompozicija umetnuta je u komplicirane sustave poligona, pravokutnika i kružnica. U 4. st. nastaje redanje amblema uz usporedne trake dekora; u 5. st. mozaik se izrađuje u potpunosti poput tepiha te se u tom dekoru stilizira i figura. Mozaik 6. st. vraća se monumentalnoj figuralnoj kompoziciji, ali je njezina naracija realnosti sintetizirana i dekorativna.

U kasnoj antici mozaik postaje gotovo glavna slikarska grana i u njemu se odražavaju promjene stilskih pravaca „impresionizma“ i „apstraktne stilizacije“. ²² U to vrijeme mozaičari Rima i Akvileje imaju takmace u provincijama Galije, na području Rajne i Podunavlja, Orijenta i iz Afrike pa čak i Hispanije i Britanije. Posebno s Orijenta i Afrike dolaze novine u stilu i motivima. U kršćanskim kulturnim građevinama i carskim palačama sve se više prelazi na dekoraciju zidova mozaikom. Rim, Solun i Carigrad u tom pogledu nisu jedina središta u 4. i 5. st. Od Justinijana, s bizantskim mozaikom nastaje nov sjajan razvoj te tehnike na području Mediterana, od Carigrada do Ravenne, od Soluna, Hiosa i Dafnija do Sicilije (Palermo, Monreale, Cefalù), Venecije i Torcella te Nea Mone.

S pobjedom kršćanstva početkom 4. st. javlja se velika potražnja za višebojnim podnim mozaicima, koji predstavljaju uravnoteženi spoj italskog crno-bijelog i afričkog polikromnog stila. Transformacija mitološko-marinskih scena i motiva lova u starozavjetne i novozavjetne motive nije bila veći problem za ondašnje putujuće majstore mozaičare. Mozaici se odlikuju ujednačenom kompozicijom, sastavljenom od figura ljudi i životinja, elegantnih su linija i sfumatura, profinjenog kolorita; rađeni su od kockica prirodnih materijala nadopunjenih staklenim teserama te tako podsjećaju na sjevernoafričke i levantske mozaike ili ih pak slijede. Iz bazilike sv. Ivana Lateranskog očuvan je samo okrugli medaljon na traventinskoj podlozi s likom Krista. To je jedini takav primjer amblema u cijelom nizu rimskih kršćanskih mozaika. U 13. st. fresko-majstor Jacopo Torriti restaurirao je i na svoju ruku prepravio neke dijelove mozaika koji su, nakon ponovnog restauriranja u 19. st., potpuno izgubili izvornost. Tako se

Constantine's palace on the Esquiline, and would also appear on the vaults of St Constance in Rome, in Hispania, Gallia and on the Adriatic, as well as in the basilica of Theodorus in Aquileia in the early 4th century. ²¹

The seasons motif in which the influence of North Africa can be seen appears in the Roman villa in Rabaçal (Penela, Portugal). Busts of the four seasons are done in very small varicoloured tesserae of natural materials and glass paste. The heads are decked with symbolic attributes – winter with artichokes and trees, spring with flowers, summer with succulent fruit and autumn with grapes. A similar artistic effect is in evidence in the triclinium, in which, along with geometrical patterns – squares, circles and Solomon's knots, there are also floral motifs made of fine limestone and blue and green glass tesserae.

In the 3rd century it was framed ornamental compositions that prevailed, and a figural composition would be inserted into complicated systems of polygons, rectangles and circles. In the 4th century came the sequencing of emblems along parallel bands of the décor; in the 5th century the mosaic was handled completely in the manner of the carpet, and in this mode the figure was also stylised. In the 6th century the mosaic went back to the monumental figural composition, but its narration of reality was synthesised and decorative.

In Late Antiquity the mosaic became almost the main pictorial technique and in it were reflected the changes in stylistic trends – impressionism and abstract stylisation. ²² At that time mosaicists from Rome and Aquileia had rivals in the provinces of Gallia, in the region of the Rhine and the Danube, the Orient, Africa, even Hispania and Britannia. Christian cult buildings and in imperial palaces tended increasingly to have their walls decorated with mosaics. Rome, Salonica and Constantinople, in this respect, were not the only centres in the 4th and 5th centuries. From Justinian's time, along with the mosaics of Byzantium, a brilliant new development of the technique came into being in the Mediterranean, from Constantinople to Ravenna, from Salonica, Chios and Daphni to Sicily (Palermo, Monreale, Cefalù), Venice and Torcello and Nea Mona.

²¹ Smith 2000, p. 130.

²² Mano-Zisi 1964, p. 501.

²² Mano-Zisi 1964, str. 501.

i podaci o “čudesnoj glavi” oslanjaju na gravuru iz 19. st. i jednu fotografiju iz 1901. godine.²³

Zanimljiv je panel iz Soluna, iz crkve sv. Đorđa (nekadašnji carski mauzolej), koji prikazuje sv. Onesifora i sv. Porfirija u oransu nadnaravne veličine, postavljene na zlatnu pozadinu u imaginarnom arhitektonskom sakralnom prostoru stroge simetrije, s prikazom paunova i golubica. Upotrijebljene su kamene, mramorne, staklene i zlatne tesere.

Vrhunac mozaičke umjetnosti postignut je u Ravenni u 6. st. Na zidu atrija, pokraj nadbiskupske kapele nalazi se natpis u temperi (originalno je bio u mozaiku): *Aut lux hic nata est aut capta hic libera regnat* („Svjetlost je ovdje rođena ili zarobljena ovdje slobodno vlada”).²⁴ Gradnju crkve San Vitale započeo je biskup Eklezije nakon povratka iz Bizanta. Helenističko-rimska tradicija zastupljena je zidnim panelima u sanktuariju, a bizantska u apsidi, te rječito svjedoče o dvjema školama te o dva različita pristupa.²⁵ U apsidi prikaz Krista i apostola donosi uravnoteženu i odvagntu površinu sastavljenu od nepravilno sječenih raznobojnih staklenih tesera, zelenkastih, smeđih, crvenkastih, plavih, bijelih itd. Eklezije je prikazan s maketom crkve, dok Vitalije iščekuje krunu.

Rimska urbanizacija i kulturni utjecaj na području Hrvatske intenzivno su započeli u 1. st., kada je rimskim mirom (*pax romana*) osiguran gospodarski temelj za kulturni napredak. Nadmoćna rimska kultura miješala se s domaćom tradicijskom, stvarajući novu provincijsku kulturu s lokalnim obilježjima, kao kamenčić u velikom mozaiku rimskoga kozmopolitizma.²⁶ Pronađeni mozaici dio su podova terma, vila (*urbana* ili *rustica*), luksuznih kuća (*domus*), bazilika i sl. Riječ je o velikim jednostavnim dekoracijama, zanatski solidno izvedenima, s multipliciranim geometrijskim uzorcima te figuralnim prikazima, npr. dupina, zeca i dr.

Mozaici izrađeni od staklene paste javljaju se diljem Rimskog Carstva pa tako i na lokalitetima u provincijama Panoniji i Dalmaciji te Histriji (*X Regio Italiae*), no njihov je broj skroman u odnosu na druga područja. Iako o izradi i upotrebi stakla nema mnogo podataka u vrelima, mozaik je, bilo kameni bilo stakleni, ipak jedna od najomiljenijih umjetničkih vrsta likovnog izražavanja tijekom antike.

With the triumph of Christianity, at the beginning of the fourth century, there was a huge demand for polychrome floor mosaics, a balanced combination of Italic black and white and African polychrome styles. The transformation of mythological and marine scenes and motifs of the hunt into OT and NT motifs presented no very great problem to the itinerant mosaic master craftsmen of the time. Motifs were characterised by an equable composition composed of figures of people and animals, with elegance in line and shading, with refined colouring from tesserae of natural materials supplemented with glass tesserae, thus recalling or following those of North Africa or the Levant. From the basilica of St John Lateran all that has survived is a round medallion on a travertine ground with a figure of Christ. This is the only example of an emblem in the whole series of Roman Christian mosaics. In the 13th century the fresco painter Jacopo Torriti restored it and of his own accord repaired several parts of the mosaic that, after renewed restoration in the 19th century lost all traces of authenticity. Data about the miraculous head, then, are drawn from an engraving of the 19th century and a photograph of 1901.²³

From Salona, the Church of St George, the former imperial mausoleum, there is an interesting panel showing St Onesiphoros and Porphyrios as orants of more than life size, placed on a golden background in an imaginary architectural sacred space, strictly symmetrical, with a depiction of peacocks and doves. Stone, marble, glass and gold tesserae are used.

The peak of the art of the mosaic was achieved in 6th century Ravenna. On the wall of the atrium, by the archbishop’s chapel is an inscription in tempera (originally mosaic): *Aut lux hic nata est aut capta hic libera regnat* [Either light was born here or, if imprisoned here, it reigns free].²⁴ The building of the Church of San Vitale was started by Bishop Ecclesius when he came back from Byzantium. The Hellenistic-Roman tradition is reflected in the wall panels in the sanctuary, and the Byzantine in the apse, which eloquently tells of the two schools and the two different approaches.²⁵ In the apse a depiction of Christ and the Apostles speaks of a balanced and carefully weighed surface composed of

²³ Oakeshott 1977, str. 66.

²⁴ Bovini 2000, str. 114.

²⁵ Bovini 2000, str. 25-26.

²⁶ Garčević 2009, str. 121.

²³ Oakeshott 1977, p. 66.

²⁴ Bovini 2000, p. 114.

²⁵ Bovini 2000, pp. 25-26.



Sl. 1. Glavnik, Poljanice, Mozaik s prikazom Orfeja, prva pol. 4.st.

Fig. 1 Glavnik, Poljanice, Mosaic with depiction of Orpheus, first half of 4th century

Zanimljivo je spomenuti dva mozaika na kojima se uočava uporaba staklene paste. To su mozaik s prikazom Orfeja, iz Glavnika na Kosovu, i mozaik s natpisom iz Peristerijeve palače u Stobiju. Stotinjak metara zapadno od željezničke postaje u selu Glavniku, na potezu Poljanice, na Kosovu, uz novo i staro korito rijeke Lab, nalaze se ostaci rimskog naselja i nekropole.²⁷ Ostaci ovog naselja otkriveni su još prije pedesetak godina i pripisuju se rimskoj postaji *Vindenis*, koja se nalazila na rimskom putu *Naissus - Lissus*, 19 rimskih milja južno od postaje *Ad Fines* (Kuršumljija).²⁸ U proljeće 1984. godine pri građevinskim radovima u dvorištu obitelji Imera Isljamija otkriven je dio rimskog mozaika.²⁹

Mozaik s likom Orfeja izveden je u tehnici *opus tessellatum*,³⁰ od većih kamenih kockica crne, bijele te ponegdje crvene i žute boje. *Opus vermiculatum*³¹ izveden je od sitnih kockica višebojne staklene paste. Riječ je o polikromnom mozaiku. Na temelju fotografije koju smo dobili od E. Shukriu, držimo da je mozaičar lik Orfeja kao i neke detalje izradio tehnikom *opus vermiculatum*, a okvir tehnikom *opus tessellatum*.

²⁷ Fidanovski 1985, str. 100 i d.

²⁸ Čerškov 1957, str. 68.

²⁹ Fidanovski 1986, str. 150.

³⁰ Shukriu 1986, str. 289.

³¹ Fidanovski 1986, str. 150.

irregularly cut multicoloured glass tesserae, green, brown, red, blue and white. Ecclesiastical is shown with a model of the church, and Vitalis is awaiting his crown.

Roman urbanisation and its cultural impact on the Croatian area started in full force in the 1st century when the Roman peace – *pax romana* – assured the economic foundation for cultural advancement. The dominant Roman mingled with the local traditional culture, creating a new provincial culture with local characteristics, a pebble in the great mosaic of Roman cosmopolitanism.²⁶ The mosaics discovered are the floors of baths, villas (*urbana* or *rustica*), luxurious houses (*domus*), basilicas and so on. They are large and simple decorations, with sound workmanship, with multiplied geometrical patterns and figural depictions, of dolphins and rabbits and so on.

Mosaics made of glass paste appear throughout the Roman Empire, including in sites in the provinces of Pannonia and Dalmatia as well as Histria (*X Regio Italiae*) but they are scant in number compared with other areas. Although the sources do not contain a lot of information about the making and use of glass, the mosaic, whether of stone or glass, was one of the favourite artistic kinds of visual expression during Antiquity.

Two mosaics in which the use of glass paste are of interest: the mosaic with the depiction of Orpheus from Glavnik, Kosovo, and a mosaic with an inscription from the Peristeria Palace in Stobi. A hundred metres west of the railway station in the village of Glavnik, on the Poljanice stretch, in Kosovo, enclosed by the new and the old bed of the River Lab, are the remains of a Roman settlement and cemetery.²⁷ The remains of this settlement were discovered fifty years back and are attributed to the Roman station called *Vindenis*, which lay upon the Roman *Naissus-Lissus* road, 19 Roman miles south of the *Ad Fines* station (Kuršumljija).²⁸ In the spring of 1984, during construction in the yard of the family of Imer Isljami, part of a Roman mosaic was uncovered.²⁹

A mosaic featuring the likeness of Orpheus was done in *opus tessellatum*³⁰ out of large stone

²⁶ Garčević 2009, p. 121.

²⁷ Fidanovski 1985, p. 100 ff.

²⁸ Čerškov 1957, p. 68.

²⁹ Fidanovski 1986, p. 150.

³⁰ Shukriu 1986, p. 289.

Dobro očuvan podni mozaik s likom Orfeja komponiran je od različitih geometrijskih motiva.³² U njegovu središnjem dijelu nalazi se Orfej koji sjedi na stijeni, tijela okrenutog nadesno. Na glavi ima frigijsku kapu. Posebno dominiraju velike i izražajne oči. U lijevoj ruci drži harfu, a u desnoj, što se ne vidi posve jasno, *stylos*. Prema Salihu, Orfej u desnoj ruci drži *plectrum*.³³ Orfej je okružen pticom, leopardom, lavom, zmijom i drvetom. Iznad glave je natpis pisan grčkim slovima, a ispred slova *O* i iza slova *P* nalazi se list bršljana (*hedera*), koji je čest motiv na sepulkralnim spomenicima rimskog doba u Dardaniji.³⁴

Iz Stobija, iz Peristerijeve palače potječe mozaik s natpisom, izveden u tehnici *opus tessellatum*, različitih dimenzija tesera. Tesere su od različitog materijala, a pronađen je i velik broj mozaičkih kockica od zelenog stakla. Mozaik je polikroman te djelomično sačuvan. Peristerije, koji je već dao učiniti mozaik, osoba je dobro poznata u Stobiju. Njegovo je ime sačuvano i otkriveno na mozaiku iz prostrane rezidencije, nazvane Peristerijeva palača, koja se nalazi nešto istočnije od raskošne rezidencije - Partenijeve palače, gdje su tridesetih godina 20. st. pronađene skulpture vrlo visoke kvalitete. Natpis koji spominje Peristerija izveden je u mozaiku te ima četiri retka, a pisan je također grčkim pismom. Natpis najvjerojatnije svjedoči o posveti i ukrašavanju prostorije u čast „Ivana - vječne tvrdnje nadanja“, koju su učinili Peristerijevi sinovi, Rufin i Aurelijan. Tumačenje je moguće ako se uzme u obzir da su Aurelijan i Rufin podigli mozaik u prostoriji u čast preminulog člana obitelji Peristerija. „Nadanje“ u tom slučaju znači kršćansku nadu u uskrsnuće i život vječni. Ako natpis nije sepulkralnog karaktera, možda ima liturgijski karakter i odnosi se onda ili na Ivana Krstitelja ili na Ivana Evangelista ili možda na nekog Ivana koji ima lokalnu tradiciju, makedonsku, u staroj crkvi. Moguća je i pretpostavka da je riječ o jednoj kršćanskoj zajednici te bi u tom slučaju imena Peristerija (Περιστερία), Perpetua (Περπέτουα), Elpidia (Ελπίδια) predstavljala ženska imena.³⁵ Natpis se datira u kraj 4. ili početak 5. st.

tesserae in white, black, and occasionally in red and yellow. *Opus vermiculatum*³¹ is done in small tesserae of polychrome glass paste; this produces a polychrome mosaic. From a photograph that we obtained from E. Shukriu, we think that the mosaic artist did the figure of Orpheus and some other details in *opus vermiculatum* and the frame in *opus tessellatum*

The well preserved floor mosaic with the figure of Orpheus is composed of different geometrical motifs.³² In the centre is a figure of Orpheus, sitting on a rock, body turned to the right. He has a Phrygian hat on his head. His large expressive eyes are particularly impressive. In his left hand he has a harp, in his right, which cannot be seen very clearly, a *stylos*. According to Salih, in his right hand Orpheus is holding a *plectrum*.³³ Orpheus is surrounded by birds and animals, a leopard, a lion and a snake, and trees. Above his head is an inscription in Greek characters, while in front of the *O* and after the *P* there is an ivy leaf, which often appears on sepulchral monuments of the Roman period in Dardania.³⁴

From the Peristeria Palace in Stobi comes a mosaic with an inscription done in *opus tessellatum*, with various sized tesserae. They are of different materials, and a large number of tesserae of green glass have been found. The mosaic is polychrome and is in a state of partial preservation. Peristeria, who had the mosaic made, is a person already well known in Stobi. His name is preserved in and discovered on a mosaic from the spacious residence known as the Palace of Peristeria, somewhat to the east of the luxurious residence of Partenius, where in the 1930s high quality sculptures were found. An epigraph mentioning Peristeria is done in mosaic and is in four lines, also written in Greek characters. The inscription probably tells of the dedication and embellishment of the room in honour of “John – eternal statement of hope” made by Peristeria’s sons Rufinus and Aurelian. The interpretation is possible if it is taken into consideration that Aurelian and Rufinus put up the mosaic in a room in honour of a departed member of Peristeria’s family. Hope, or hoping, in this case, refers to Christian hope for the

³² Jeremić 2005, str. 185-191.

³³ Dobruna-Salihu 2011, str. 280.

³⁴ Dobruna-Salihu 2003-2005, T. 4. sl.8, T. 37, sl. 68, T. 41, sl. 74 i d.

³⁵ Cvetković-Tomašević 1978, str. 44.

³¹ Fidanovski 1986, p. 150.

³² Jeremić 2005, pp. 185-191.

³³ Dobruna-Salihu 2011, p. 280.

³⁴ Dobruna-Salihu 2003-2005, Plate 4. Fig.8, Plate 37, Fig. 68, Plate 41, Fig. 74 ff.



Sl. 2. Salona, *Basilica urbana*, mozaik s natpisom, poč. 5. st
 Fig. 2 Salona, *Basilica urbana*, mosaic with inscription, early 5th century

Iz Salone potječu dva mozaička natpisa koji su također, poput ovog iz Stobija, izrađeni od staklene paste. Mozaik u *Basilica episcopalis urbana* izveden je u tehnici *opus tessellatum* od kockica tvrdoga vapnenca bijele boje te različitih nijansa crvene, smeđe i plave boje, veličine 1 x 1 x 1 cm. Za okvir slova na natpisu služila je staklena pasta indigo plave boje.

Kršćanski mozaik u polukružnom hodniku bazi-like urbane ornamentalnog je karaktera. Cijelu površinu prekriva mozaik geometrijskog uzorka, sastavljen od malih osmerokutnih polja između kojih nastaju površine u obliku križa i izduženih pravokutnika. Površine osmerokuta ispunjavaju kvadrati, koncentrični kvadrati, tzv. malteški cvjetovi i uzorci u obliku šahovske ploče. Polja koja su u obliku križa prekriva pleterni motiv - traka koja se četiri puta

resurrection and the life beyond. If the inscription is not sepulchral in nature, it might perhaps have a liturgical character, and will therefore refer to John the Baptist or John the Evangelist, or perhaps some certain John who has a local, Macedonian, tradition in the old church. Or it might be all about a Christian community in which case the names Peristeria (Περιστερία), Perpetua (Περπέτουα), Elpidia (Ελπίδια) would be women's.³⁵ The inscription is dated to the end of the 4th or the beginning of the 5th century.

Salona furnished two mosaic inscriptions that are also, like that from Stobi made from glass paste. In *opus tessellatum* a mosaic was done in 1 cubic centimetre tesserae of hard limestone in white and various shades of red, brown and blue in the Basil-

³⁵ Cvetković-Tomašević 1978, p. 44.

presavija, poprimajući i sama oblik križa. U izduženim pravokutnicima smjestio se geometrijski uzorak, sličan stiliziranoj grančici. U podu prezbiterijske bazilike urbane, lijevo od crkvene osi, sačuvalo se mozaičko polje u obliku paralelopipeda kojem gornja horizontalna stranica iznosi 1,05 m, donja 0,84 m, desna vertikalna 0,91 m i lijeva vertikalna 0,84 m. Slova su visine 11 - 12 cm. Mozaik je pohranjen u lapidariju Arheološkog muzeja u Splitu, inv. br. A 5975.

U Saloni na Marusincu, u bazilici sv. Anastazija također su otkriveni mozaici izvedeni u tehnici *opus tessellatum*, u kockicama od tvrdog vapnenca i rjeđe od mramora, i to samo za svijetloplave tonove, veličine 1 x 1 cm. Staklene kockice javljaju se samo na natpisu. Kamenčići su kvadratni, koliko to dopušta ručna obrada kamena, a samo kod presijecanja svinutih s ravnim primjercima i kod oštih kutova upotrijebljeni su duguljasti i krivokutni oblici. Boje su: svijetloplava i tamnoplava, svijetlocrvena i crvena, oker-žuta, ljubičasta, bijela i crna.

Mozaiku u sjevernom bočnom krilu odgovara na južnom bočnom krilu mozaičko polje koje leži u razini peristila i zaslužuje posebnu pozornost zato što se na njemu javljaju fragmenti natpisa, jedinog na marusinačkim mozaicima iz 5. st. Ovaj četveroredni mozaički natpis izveden u mlađem podu (grobne kapele) memorije i preko starog mozaika s natpisom prekinut je na desnoj strani. Iz prilično oštećenog natpisa doznaje se samo ime i stalež pokojnika. Mozaik je pohranjen u lapidariju Arheološkog muzeja u Splitu pod inv. brojem A 5971. Datacija: 5. st.?

Slova su izrađena od plavih stakalaca, visine 8 cm. Od starijeg donjeg natpisa preostala su samo dva retka.³⁶

Od ranijih mozaika na kojima je vidljiva staklena pasta svakako valja istaknuti mozaik iz Salone, rijeđak spomenik sepulkralnog karaktera,³⁷ Aurelijanov, s natpisom izvedenim u tehnikama *opus tessellatum* i *opus vermiculatum* od sitnih kockica tvrdog vapnenca bijele, svijetlocrvene, smeđe, crne, zelene, zelenkastosive (staklena pasta) i plave boje. Mozaik je dosta dobro očuvan. Pohranjen je u lapidariju Arheološkog muzeja u Splitu, inv. broj 5492/1. Mozaik je pronađen u mauzoleju koji je otkriven 1930. godine u tupinolomu Klanac istočno od Manastiri-

ica episcopalis urbana of Salona. Indigo blue glass paste was used for a framing of the letters in the inscription.

The Christian mosaic in the semicircular corridor of the basilica urbana is of an ornamental character. The whole surface is covered by a mosaic that has a geometrical pattern composed of small octagonal fields between which surfaces in the shape of the cross and elongated rectangles appear. The areas of the octagons are filled with squares, concentric squares, the Maltese flowers, so called, as well as patterns in checkerboard shape. Inside the fields that form the cross there is an interlacing motif – a band that is folded four times and itself takes on the form of the cross. In the elongated rectangles there is a geometrical pattern, rather like a stylised branch. In the floor of the presbytery of the basilica urbana, a bit to the left of the longitudinal axis of the church, there is a mosaic field in the shape of a parallelepiped: the top horizontal size is 1.05 m long, the lower, 0.84 m; the right vertical side is 0.91 m, and the left vertical 0.84 m. The letters are about 11 to 12 cm high. The mosaic is kept in the lapidarium of the Archaeological Museum in Split, inv. no. A 5975.

In Marusinac, Salona, in the Basilica of St Anastasius, mosaics also done in *opus tessellatum* were revealed, in tesserae of hard limestone and less often of marble, only for light blue colours, of one centimetre squared. The glass tesserae appear only in the inscription. The pebbles are square, as far as hand-working of the stone permits, and only in the case of the intersection of curved with straight forms and in the case of acute angles are longish or non-right angled forms. The colours are light and dark blue, light red and red, ochre yellow violet, white and black.

The mosaic in the northern side wing corresponds to the mosaic field in the southern side wing, at the level of the Peristyle, and deserving of particular attention, since fragments of an inscription appear on it, the only one of its kind in the Marusinac mosaics of the 5th century. This four-line mosaic inscription is done in a later floor (sepulchral chapel) of the memoria and across an older mosaic with an inscription is interrupted on the right hand side. From the fairly much damaged inscription we learn only the name and estate of the decedent. The mosaic is stored in the lapidarium of the Archaeological Museum in Split, inv. no. A 5971. It is dated to the 5th century.

³⁶ Forschungen 1939, str. 80, sl. 107; str. 152, br. 18; Salona IV, I, 2010, str. 377-378, no. 144.

³⁷ Cambi 1973, str. 22, T. 7.



Sl. 3. Salona, Nadgrobni spomenik Tita Aurelija Aurelijana, Arheološki muzej u Splitu
 Fig. 3 Salona, Funerary Monument of Titus Aurelius Aurelian, Archaeological Museum, Split

na.³⁸ Aurelijanov mozaik, do sada jedini mozaik s nadgrobnim natpisom iz Salone, stalno privlači pozornost istraživača, kako zbog kolorita, tako i zbog simboličkog sadržaja, pa je i razumljivo da o njemu svjedoči opsežna literatura.

U plavkastom pleneru izveden je lik umrlog dječaka. Dječak je prikazan kako sjedi na stolici sa svitkom u ruci (*rotulus*), a sa strane se nalaze ptice (jarebice?). Neobično je što je dječak odjeven u palij te u ruci drži *rotulus*, što ga karakterizira kao odraslu osobu i pjesnika, govornika ili filozofa.³⁹ Spada u skupinu prikaza intelektualnoga života na rimskim nadgrobnim spomenicima, koji je uključivao i likove djece.⁴⁰

U natpisu piše da dječak ima samo devet godina, no izgleda mnogo starije, a tom dojmu pridonosi i *rotulus*. To je u skladu s kasnoantičkim vjerovanjima da intelektualne vrline priskrbljuju zagrobni život.⁴¹ Desno od ptice je herma s prikazom dječakova

The letters are of blue pieces of glass and are 8 cm high. Only two lines have remained of the older inscription underneath.³⁶

Certainly, worthy of mention of the earlier mosaics in which glass paste can be seen is a mosaic from Salona, a rare monument of a sepulchral character³⁷ of Aurelius Aurelian from an inscription done in *opus tessellatum* and in *opus vermiculatum* of small tesserae of hard white, light red, brown, black, green, greeny-grey (glass paste) and blue limestone. The mosaic is in a good state of preservation. It is kept in the lapidarium of the Archaeological Museum in Split, inv. no. 5492/1. It was found in a mausoleum that was discovered in 1930 in the marlstone quarry of Klanac to the east of Manistirine.³⁸ The Aurelian mosaic is to date the only mosaic with a funerary inscription from Salona, and is a constant draw to researchers, because of both its colour and its symbolic content, and naturally it has been greatly discussed in the literature.

The figure of a deceased boy is done in a bluish open air setting. He is shown sitting on a chair

³⁸ Cambi 1986, str. 61-108; Prijatelj 1954, str. 29-35; Duplančić 2017, str. 71 i d.

³⁹ Cambi 2002, str. 187.

⁴⁰ Ewald 1999, str. 207-211, T. 44-46; Duplančić 2017, str. 79.

⁴¹ Cambi 2002, str. 187.

³⁶ Forschungen 1939, p. 80, Fig.107; p. 152, no. 18; Salona IV, I, 2010, pp. 377-378, no. 144.

³⁷ Cambi 1973, p. 22, Plate 7.

³⁸ Cambi 1986, pp. 61-108; Prijatelj 1954, pp. 29-35; Duplančić 2017, p. 71 and further.



Sl. 3a. Salona, nadgrobnji spomenik Tita Aurelija Aurelijana, Arheološki muzej u Splitu
 Fig. 3a Salona, Funerary Monument of Titus Aurelius Aurelian, Archaeological Museum, Split

pedagoga,⁴² Apolona ili Dioniza,⁴³ ugledne osobe iz umjetničkog života,⁴⁴ djevojke,⁴⁵ neke pjesnikinje,⁴⁶ odnosno pjesnikinje Sapfe.⁴⁷ Cijeli prizor uokviren je pleternom ornamentikom. Mozaik je po likovnom sadržaju jedinstven, a njegov simbolični smisao nije sasvim razjašnjen.⁴⁸ Mauzolej se datira u kraj 3. ili početak 4. stoljeća.⁴⁹ Mozaik je sličan mozaiku iz jedne grobnice na Via Ostia u Rimu, koji Blake datira između 3. i 4. st.⁵⁰

Mozaički podovi iz Nina (*Aenona*) pronađeni su na zemljištu Stanka Šalova p. Jakova, istočno od Foruma, uz cestu koja od crkve sv. Križa vodi prema crkvi sv. Ambroza. Ostaci rimske vile i njezinih mozaika uočeni su u vrijeme Drugoga svjetskog rata. Mozaici se nalaze ispod zemlje, *in situ*, u dosta plitkom sloju. Zahvaljujući vjernim kopijama na staklu, što ih je izradio nekadašnji ninski liječnik dr. Snjegovoj, jasno je da su to veoma vrijedni i zanimljivi primjerci mozaičkog umjetnog obrta, koji su ukrašavali pod jedne rimske kuće u Ninu. Uz medaljone s pojedinačnim figurama životinja (slon, kozorog, simboli zodijskih i dr.), središnji dijelovi

with a scroll in his hand (*rotulus*), with birds at the side (partridges?). It is uncommon for a boy to be dressed in a *pallium* and to have a *rotulus* in his hand, which would be the attribute for a grown person, poet, orator or philosopher,³⁹ but it does belong in a group of depictions of the intellectual life on Roman tombstones, which included the figures of children too.⁴⁰

In the inscription the boy is said to be only nine years old, but he seems much older, the *rotulus* adding to this impression. This is in accord with Late Antique belief that intellectual virtues can be beneficial in the afterlife.⁴¹ To the right of the bird is a herm with a depiction of the boy's teacher,⁴² Apollo or Dionysus⁴³, a distinguished person from the world of art⁴⁴, a girl⁴⁵, some poetess⁴⁶ or perhaps the poetess Sappho.⁴⁷ The whole scene is framed in interlacing ornamentation. In terms of visual contents, this is a unique mosaic, but its symbolic meaning has not been thoroughly explained to date.⁴⁸ The mausoleum can be dated to the end of the 3rd or the early 4th century.⁴⁹ The mosaic is similar to the mosaic of a grave on via Ostia in Rome, which Blake dates between the 3rd and 4th century.⁵⁰

Mosaic floors in Nin (*Aenona*) were found on land owned by Stanko Šalov son of Jakov, east of the Forum, along the roadside, which from Holy Cross Church goes towards St Ambrose's. The remains of a Roman villa and its mosaics were remarked during World War II. The mosaics are under the soil, *in situ*, in a fairly shallow stratum. Thanks to the faithful copies in glass made by the former Nin physician Dr Snjegovoj, it can be seen that they are very valuable and interesting specimens of the art of the mosaic, once gracing the floor of a Roman house in Nin. Along with medallions with individual figures of animals (elephant, chamois, symbols of the zodiac and other things), the central sections

⁴² Rendić-Miočević 1965, str. 170; Rendić-Miočević 1985, str. 36.

⁴³ Cambi 1973, str. 22.

⁴⁴ Cambi 1986, str. 97.

⁴⁵ Cambi 2000, str. 84.

⁴⁶ Cambi 1991, str. 131.

⁴⁷ Marin 1988, str. 15; Marin 1991, str. 8; Marin *et al.* 2002, str. 16.

⁴⁸ Duval 1976, str. 15; Marin 1988, str. 15.

⁴⁹ Duplančić 2017, str. 81.

⁵⁰ Blake 1940.

³⁹ Cambi 2002, p. 187.

⁴⁰ Ewald 1999, pp. 207-211, Plate 44-46; Duplančić 2017, p. 79.

⁴¹ Cambi 2002, p. 187.

⁴² Rendić-Miočević 1965, p. 170; Rendić-Miočević 1985, p. 36.

⁴³ Cambi 1973, p. 22.

⁴⁴ Cambi 1986, p. 97.

⁴⁵ Cambi 2000, p. 84.

⁴⁶ Cambi 1991, p. 131.

⁴⁷ Marin 1988, p. 15; Marin 1991, p. 8; Marin *et al.* 2002, p. 16.

⁴⁸ Duval 1976, p. 15; Marin 1988, p. 15.

⁴⁹ Duplančić 2017, p. 81.

⁵⁰ Blake 1940.

sastavljeni su od kvadratno uokvirenih scena kojih su motivi uzeti iz arene.⁵¹ Prikazane su različite varijante borbi gladijatora: *murmillio*, *retiarius*, *thraex* i drugi poznati tipovi gladijatora u borbi.⁵² Do sada su ovi mozaici navedeni u literaturi isključivo prema staklenim kopijama, no zahvaljujući disertaciji i radu Martine Dubolnić Glavan⁵³ te monografiji Marije Kolega⁵⁴ dobili smo cjelovitu sliku ninskih mozaika s prikazima gladijatorskih borbi. Je li pri izradi sitnih detalja na mozaicima korištena staklena pasta, nije poznato.

U katekumeneju južno od katedrale u Zadru izrađen je motiv s jelenima flankiranim oko kantara. Zadarski je mozaik mnogo vještije i raskošnije izrađen nego onaj nažalost izgubljeni u salonitskom baptisterijalnom sklopu. Boje su bogatije, a figure jelena vitkije su i gipkije. Dio koji dočarava vodu izveden je sitnijim staklenim teserama manjim od 1 cm), sivkastoplavih, zelenkastih i bijelih tonova. Riječ je o kvalitetnijoj izvedbi. Mozaik se datira u 6. st.⁵⁵

Položaj Putalj s današnjom crkvom sv. Jurja iznad Kaštel Sućurca kod Salone (današnji Solin) smješten je na južnoj padini Kozjaka. Tu je u srednjem vijeku na ostacima ranokršćanskoga kompleksa podignuta spomenuta crkva. Riječ je jednobrodnoj građevini s četvrtastom apsidom. Da je na Putalju bilo rašireno kršćansko vjerovanje, vidi se iz ostataka kasnijeg antičkog polikromnog mozaika sačuvanog *in situ* kao i tragova pozlate na teserama zidnih mozaika.⁵⁶

U južni rezidencijalni dio Dioklecijanove palače ulazilo se iz Vestibula, koji u gornjem dijelu ima kružni oblik. Drži se da je taj prostor, izvana četvrtast, a iznutra kružni, imao raskošno ukrašen kupolasti svod, na što upućuju ostaci mozaika od staklenih kockica. Zidovi Vestibula kao i ostali zidovi carskog stana bili su izvedeni u tehnici *opus incertum* i presvučeni mramorom, dok je kupola bila prekrivena mozaicima koji su možda pokrivali i pod. Dva ulomka nalaze se u Arheološkome muzeju u Splitu. U unutrašnjosti Vestibula bile su četiri velike niše. Godine 1912. obnovljena je kupola Vestibula, dok su 1957. rekonstruirani svodovi donjeg

are made of square framed scenes, the motifs of which are taken from the arena.⁵¹ Various kinds of gladiatorial combat are shown, *murmillio*, *retiarius*, *thraex* and other gladiatorial specialities, in combat.⁵² To date these mosaics have been referenced in the literature only from the glass copies, but thanks to the dissertation and paper of Martina Dubolnić Glavan⁵³ and the monograph of Marija Kolega⁵⁴ we have obtained a complete picture of the Nin mosaic with depictions of gladiators fighting. It is not known whether the small details on the mosaics were made with the use of glass paste.

In the catechumeneum to the south of Zadar Cathedral there is a motif of deer flanking a cantharus. The Zadar mosaic is much more skilfully and luxuriously made than that alas lost in the Salona baptistery complex. The colours are richer, and the figures of the deer are slender and lithe in comparison. The part that represents water is executed in very small glass tesserae (smaller than 1 cm square), in grey-blue, green and white ones. The workmanship is high quality. The mosaic is dated to the 6th century.⁵⁵

Today's church of St George na Putalju over Kaštel Sućurac by Salona (today, Solin) is an oriented single-nave church with a square apse, but is preserved only in its foundations. In later Antiquity Putalj was used by a Christian cult, which can be seen, among other things, from the remains of a Late Antique polychrome mosaic preserved *in situ*, and on the tesserae of the wall mosaics, there are traces of gilding.⁵⁶

The southern residential part of Diocletian's Palace was accessed from the Vestibule, which is circular in its upper part. It is thought that this space, square outside but circular inside, had an opulently embellished domed ceiling, as suggested by the remains of mosaics of glass tesserae. The walls of the Vestibule, like the other walls of the imperial residence, were done in *opus incertum* and revetted in marble, while the dome was covered with mosaics, which also perhaps covered the floor. Two fragments are to be seen in the Archaeological Museum in Split. There were once in the

⁵¹ Suić 1968, str. 46, T. XXII, sl. 3 i 4; Suić 1981, str. 289.

⁵² Olivová 1984.

⁵³ Dubolnić Glavan 2015 (doktorski rad u rukopisu); Dubolnić Glavan 2018, str. 25-70.

⁵⁴ Kolega 2019.

⁵⁵ Bianchi 1877, str. 120,121; Meder 2003, str. 87.

⁵⁶ Burić *et. al.* 2001, str. 122.

⁵¹ Suić 1968, p. 46, Plate XXII, Fig. 3 and 4; Suić 1981, p. 289.

⁵² Olivová 1984.

⁵³ Dubolnić Glavan 2015 (MS doctoral dissertation); Dubolnić Glavan 2018, pp. 25-70.

⁵⁴ Kolega 2019.

⁵⁵ Bianchi 1877, pp. 120-121; Meder 2003, p. 87.

⁵⁶ Burić, Čače, Fadić 2001, p. 122.

prostora Vestibula te je uređen pod i zidovi gornjeg prostora Vestibula. Od 1959. do 1963. obnovljen je pod donjeg prostora Vestibula i središnje dvorane te dijela hodnika do južnih vrata. Južni dio terase Vestibula uređen je 2009. godine. Zanimljivo je napomenuti da prilikom arheoloških istraživanja i danas doslovno brojimo pojedinačne kockice cjelovitih mozaika, baš kako ih je krajem 19. stoljeća brojio i don Frane Bulić pri popravku kupole Vestibula. Tesere su bile od staklene paste u nekoliko boja. Hrvatski književnik i pjesnik Marko Marulić vidio je kupolu s mozaicima još u 16. stoljeću.⁵⁷

Zbog planirane gradnje poslovno-stambenog objekta *Small Mall* na križanju Ulice Domovinskog rata i Vukovarske ulice u Splitu te pristupne rampe za taj objekt, faza 1, od listopada do prosinca 2013. arheološki je istraživana Ulica Domovinskog rata (A. Penović).

Navedena lokacija nalazi se istočno od arheološkog lokaliteta *Ad basilicas pictas*, pa su stoga pretpostavke o rasprostranju lokaliteta na istok potvrđene ovim iskopavanjima.⁵⁸

Splitski poluotok bio je sastavni dio salonitanskoga agera te je imao važnu ulogu u životu šireg urbanog prostora Salone. Centurije su obuhvaćale 100 jugera zemlje, tj. oko 50 ha poljoprivrednog zemljišta parceliranog na pravilne kvadrate. Takva organizacija prostora uvjetovala je gradnju uzdužnih i poprečnih komunikacija, koja se i danas nazire u rasteru grada Splita. Od pokretnog arheološkog materijala valja spomenuti ulomke amfora koji se datiraju od početka 4. do kraja 6. st, lucerne s reliefnim motivima, poklopce i zdjele, *terra sigillata* te manji broj ulomaka stakla, metalnih predmeta, mramornih obloga, staklene tesere mozaika te brončani novac. Cjelokupan pokretni materijal datiran je od početka 4. do kraja 6. st., osim pet ulomaka srednjovjekovne arhajske stolne keramike. Uz zapadni profil sonde pronađen je skupni nalaz metalnih predmeta: zidarska žlica, klin, brončani visak i alatka, a u neposrednoj blizini na istoj koti otkriven je i novac cara Konstantina Velikog kao i brončani lim u obliku lovorova lista čiji je rubni dio lista ukrašen punciranjem, a središnji iskucanim žljebovima.

Sredinom 6. stoljeća nadbiskup Ravenne bio je carski štićenik Maksimijan (*Maximianus*), rođen u istarskom gradu Vistri (*Vistrum*). Nakon dovršenja

interior of the Vestibule four large niches. In 1912 the dome of the Vestibule was repaired, and in 1957 the vaults of the lower space of the Vestibule were reconstructed, and the floor and walls of the upper space of the Vestibule were arranged. From 1959 to 1963 the floor of the lower space of the Vestibule and the central hall and part of the corridor to the southern gate were renovated. The southern part of the terrace of the Vestibule was renovated in 2009. Interestingly, at the end of the 19th century, Frane Bulić was counting the tesserae in the same way we do today. The tesserae were of glass paste, in several colours. Croatian poet and man of letters Marko Marulić saw remains of the wall mosaics in the 16th century.⁵⁷

Because of the planned building of the mixed use structure Small Mall at the crossing of Ulica Domovinskog rata and Vukovarska ulica in Split and the access ramp for this facility, phase 1, from October to December, Ulica Domovinskog rata was the subject of rescue archaeological excavations (A. Penović).

This site is east of the archaeological site *Ad basilicas pictas*, and so the hypothesis that the site extended eastward was borne out by these excavations.⁵⁸

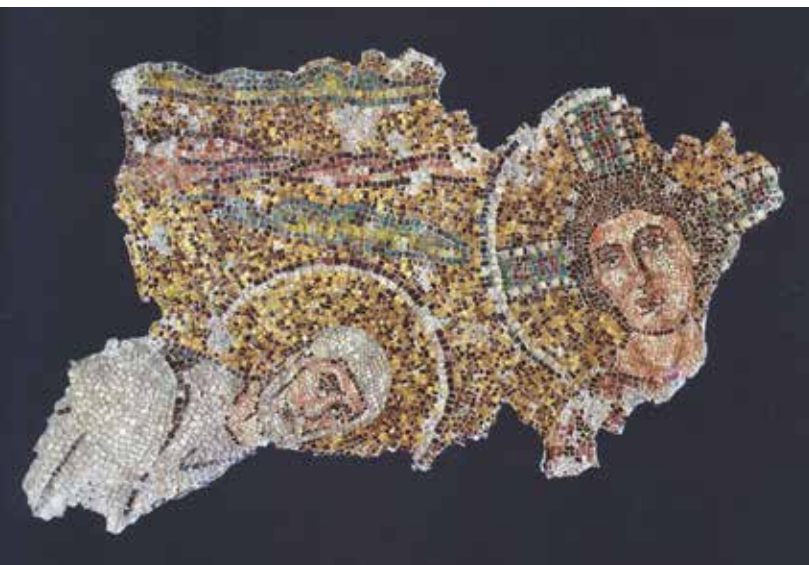
The Split peninsula was an integral part of the Salona ager, and had an important role in the life of the wider urban area of Salone. A century comprised 100 iugera, i.e. was about 50 hectares of farmland, parcelled out into regular squares. This kind of organisation of the land entailed the building of longitudinal and transverse communications which can still be seen today in the grid of the city of Split. As for moveable archaeological material worthy of mention are amphora fragments that date from the early 4th to the end of the 6th century; oil lamps with relief motifs, lids and bowls, *terra sigillata* and a smallish number of fragments of glass, metal objects, marble revetments, glass mosaic tesserae and bronze coins. All the moveable materials are dated to the period from the early fourth to the end of the sixth century, apart from five fragments of medieval archaic tableware. Along the western profile of the test trench a set of metal objects was found: a builder's mortar ladle, a wedge, a bronze plumb bob and tools while in the immediate vicinity at the same level a coin of Constantine the Great was found, as

⁵⁷ Matulić 2005, str. 227-228; Marasović, Alujević 2007, str. 155-179; Mrduljaš 2011, str. 674-675.

⁵⁸ Penović 2013, str. 606 i d.

⁵⁷ Matulić 2005, pp. 227-228; Marasović, Alujević 2007, pp. 155-179; Mrduljaš 2011, pp. 674-675.

⁵⁸ Penović 2013, p. 606 and further.



Sl. 4. Pula, fragment mozaika s prikazom *Traditio legis*, Sv. Marija Formosa, sredina 6. st., Arheološki muzej Istre

Fig. 4 Pula, fragment of a mosaic showing *Traditio legis*, St Mary Formosa, mid-6th century, Archaeological Museum of Istria

monumentalnih građevina u Ravenni, dolazi u Pulu i podiže veličanstvenu trobrodnu baziliku svete Marije u Puli.

Zbog ljepote podnih mozaika i stupova od alabastera i mramora crkva se zvala Formosa („lijepa“).⁵⁹ Imala je dvije okrugle pastoforije i dvije križolike spomen kapelice te poligonalnu apsidu koja se pružala prema van. Od ovog kompleksa sačuvana je samo južna kapela. Od bogatog ukrasa sačuvan je dio zidnog mozaika s apside kapele s prizorom *Traditio legis* (Isus predaje zakon svetom Petru), ispod njega prolazi friz u gipsu ukrašen cvijećem i voćem.⁶⁰ Ulomak mozaika pokazuje visoke kvalitete iz 6. stoljeća. Kromatske osobine ponešto se razlikuju od porečkih mozaika, a način postupanja s pokretima i detaljima je inferioran. Njegova je važnost što potvrđuje postojanje mnogih drugih građevina s bogatim mozaičkim ukrasom. U Istri (*Histria*) stvorili su ih ravenski majstori ili oni koji su se školovali u toj školi. Bojanje je također blisko, posebno jedinstvena tamnoplava boja pozadine u malim apsidama Eufrazijeve bazilike.

U izvedbi mozaika je osim tesera (kamenja) upotrijebljena i staklena pasta. U pulskoj crkvi Presvetog Srca bili su pohranjeni podni i zidni mozaici s neutvrđenih lokaliteta. Danas su mozaici smješteni u tvrđavi Bourguignon.

well as sheet bronze in the shape of a laurel leaf the edge of which is ornamented with punching and the central part with repoussé grooves.

In the mid-6th century, the Archbishop of Ravenna was the imperial protégé Maximian, born in the Istrian town of Vistra. After he had finished the monumental buildings in Ravenna, he saw to the building of the majestic three-nave basilica of St Mary in Pula.

Because of the beauty of the floor mosaics and alabaster and marble columns, the church was known as Formosa, or lovely.⁵⁹ It had two round pastophoria and two cross-shaped memorial chapels as well as a polygonal apse that extended outwards. Only the southern chapel is left of this complex. Part of the wall mosaic from the apse of the chapel remains from the opulent ornamentation; it has a scene of *Traditio legis* in which Jesus transfers the law to St Peter) and below it is a frieze in plaster decorated with flowers and fruits.⁶⁰ A fragment of the mosaic shows the high qualities of the 6th century. The chromatic features are a bit different from the Poreč mosaics, and the manner of dealing with movements and details is inferior. The importance of it is that it confirms the existence of many other buildings with rich mosaic decoration. In Istria (*Histria*) they were created by the craftsmen of Ravenna or those trained in that school. The colours were also close, particularly the unique dark blue of the background in the small apses of the Eufhrasian Basilica.

In the making of mosaics, alongside stone, glass paste tesserae were also used. Stored in the Pula Church of the Sacred Heart were floor and wall mosaics from unknown places. Today the mosaics are kept in Bourguignon Fort.

Roman Nezactium was at the tip of a prehistoric hill fort settlement. In the space between the baths and the forum, in the fifth century a religious complex of parallel churches was built on two strata of ancient ruins. The northern, smaller and older church was placed on the southern part of the baths down to the cistern in the east. In the sanctuary of the church the remains of a small raised rectangular dais were found, and also discovered were empty stone vessels for reliquaries, a polychrome floor mosaic with a depiction of a cantharus and vine tendrils as well as gilt tesserae of a wall mosaic.⁶¹

⁵⁹ Cambi 1995, str. 597.

⁶⁰ Cambi 2002, str. 299.

⁵⁹ Cambi 1995, p. 597.

⁶⁰ Cambi 2002, p. 299.

⁶¹ Ujčić 2006, p. 177.

Rimski Nezakcij nalazio se na vrhu prapovijesnog gradinskog naselja. Na prostoru između kupališta i foruma, na dva sloja drevnih ruševina, sagrađen je u 5. stoljeću sakralni kompleks paralelnih crkava. Sjeverna, manja i starija, crkva smještena je na južnom dijelu terma do cisterne na istoku. U svetištu crkve otkriveni su ostaci malog uzdignutog pravokutnog podija, a pronađene su i prazne kamene posude za čuvanje relikvija, raznobojni podni mozaik s prikazom kantara i vitica vinove loze te pozlaćene pločice zidnog mozaika.⁶¹

Na području kontinentalnog dijela Hrvatske, dakle na prostoru rimske Panonije nije pronađeno mnogo mozaičkih nalaza, no vrijedno je spomenuti lokalitet Certisiju. Antički kompleks *Certissia* (današnji Štrbinci) leži oko 3 km južno od Đakova. Godine 1895. otkriveni su ostaci kasnoantičke vile te podni mozaik. Iako je arhitektura potpuno uništena, sačuvano je nekoliko manjih nalaza te oskudni ostaci podnih i zidnih mozaika. Očuvan je ulomak crno-bijelog mozaika, kao i razbacane tesere zidnog mozaika raznobojnog prozirnog stakla. Tesere su od plavog, svijetlozelenog, žućkastog i bjelkastog stakla, a neke imaju tragove pozlate.⁶²

Vrhunac dostignuća u likovnosti ranokršćanskoga razdoblja na čitavom području Hrvatske, ali i znatno šire zacijelo su zidni mozaici koji se nalaze u Eufrazijevoj bazilici.⁶³ Likovni se program u porečkoj bazilici može promatrati i proučavati u cijelosti pa iako ima rekonstrukcija, mozaici su u neobično dobrom stanju.⁶⁴

Osim podnih mozaika javljaju se i zidni mozaici različitih tehničkih i stilskih karakteristika, a izvedeni su manjim kockicama, često od raznobojnoga stakla. Umorna antička umjetnost još će jednom procvasti kasnim, raskošnim cvatom, što se dogodilo u Eufrazijevoj bazilici u 6. st. Porečki biskup Eufrazije podigao je na mjestu starije crkve svoju raskošnu baziliku. Na mramornim dovratcima portala, na impostima kapitela uklesan je njegov monogram, a njegov lik prikazan je u apsidalnom mozaiku. Mozaici se javljaju kao čudesna, kasna ravnoteža između tradicije koju je nekoć stvorio prisni, neposredni odnos prema stvarnosti čovjeka i svijeta te neumitnog udaljavanja od te stvarnosti koju je donosilo vrijeme. U blistavim i raskošnim

In inland Croatia, that is, the area of Roman Pannonia, not many mosaic finds have ever been made, but it is worth mentioning the site of Certissia. Ancient Certissia (today, Štrbinci) is about 3 km south of Đakovo. In 1895 the remains of a Late Antique villa and a floor mosaic were found. Although the architecture is completely destroyed, apart from a few minor finds, only the meagre remains of floor and wall mosaics are preserved. One of the things preserved is a fragment of black and white mosaic, as well as the scattered tesserae of a wall mosaic of varicoloured transparent glass. The tesserae are of blue, light green, yellow and white glass, and some of them show traces of gilding.⁶²

The high point of artistic achievements in the Early Christian period in the whole area of Croatia, and much further afield, must be the wall mosaics in the Euphrasian Basilica.⁶³ The visual programme in the Poreč basilica can be observed and studied in its entirety, and although there are some reconstructions, the mosaics are in uncommonly good condition.⁶⁴

As well as floor mosaics, there are also some wall mosaics that have varied technical and stylistic characteristics, done with smallish tesserae, often of various coloured pieces of glass. Ancient art, once fatigued, was to have one more late but luxuriant flowering, and this happened in the Euphrasian Basilica in the 6th century. Euphrasius, bishop of Poreč, built his grand basilica on the site of an earlier church. His monogram is carved on the marble door jambs of the portal, on the imposts of the capitals, and his likeness is presented in the mosaic of the apse. The mosaics seem miraculous, a late balancing between tradition that was once created by an intimate and direct attitude to the reality of people and the world and the inevitable distancing from this of this reality brought by the passage of time. In the brilliant and splendid pictures one after another, real figures and symbols are encountered, portraits and stiff masks, the last visual illusions of three-dimensional space are interwoven with the impenetrable plane of the golden background. They show a series of figures of the apostles in a frieze above a triumphal arch and Christ on a blue globe

⁶¹ Ujčić 2006, str. 177.

⁶² Migotti *et. al.* 1998, str. 15, 115, kat. br. 9.

⁶³ Prelog 1986, usp. table.

⁶⁴ Terry, Maguire 1998, str. 199-221; Terry, Maguire 2000, str. 159-181; Terry, Gilmore Eaves 2000; Terry, Gilmore Eaves 2007.

⁶² Migotti *et. al.* 1998, pp. 15, 115, cat. no. 9.

⁶³ Prelog 1986, see plates.

⁶⁴ Terry, Maguire 1998, pp. 199-221; Terry, Maguire 2000, pp. 159-181; Terry, Gilmore Eaves 2000; Terry, Gilmore Eaves 2007.



Sl. 5. Poreč, Eufrazijeva bazilika, Lik Krista, 6.st.
 Fig. 5 Poreč, Euphrasian Basilica,
 figure of Christ, 6th century

slikama susreću se, jedan uz drugoga, stvarni likovi i simboli, portreti i ukočene maske, isprepleću se posljednje likovne iluzije trodimenzionalnog prostora s neprobojnom plohom zlatne pozadine.

Prikazi apostola u frizu iznad trijumfalnoga luka te Krista koji sjedi na plavom globusu s otvorenim diptihom i natpisom *Ego sum lux vera* (Pantokrator) nedvojbeno iskazuju tradicionalnu ikonografsku shemu i stilski pristup. Težište čitavoga programa počiva na središnjem motivu u apsidalnoj kupoli, koji prikazuje Bogorodicu na tronu i maloga Krista, uz nazočnost arkandela, nepoznatih mučenika, članova crkvene hijerarhije, lokalnoga mučenika Maura te graditelja. Uz rub trijumfalnoga luka nižu se medaljoni u kojima se nalaze poprsja dvanaest svetica, dok se u tjemenu sada nalazi janje, a nekoć je po svoj prilici bilo poprsje bradatog Krista.⁶⁵ Između prozora nalazi se u sredini prikaz jednoga arkandela, lijevo je sv. Zaharija, a desno sv. Ivan Krstitelj. Na kovčežiću koji Zaharija drži u rukama uočava se najvjerojatnije Danijel među lavovima,

with an open diptych and the legend *Ego sum lux vera* (Pantocrator) undoubtedly shows a traditional iconographic scheme and stylistic approach. The focus of the whole programme is on the central motif in the dome of the apse that shows the Virgin on the throne with the baby Jesus, in the presence of archangels, unidentified martyrs, members of the ecclesiastical hierarchy, the local martyr Maurus and the builders. Along the edge of the triumphal arch are medallions in which there are busts of twelve female saints, while in the top there is now a lamb and once, probably, a bust of a bearded Christ.⁶⁵ Between the windows, lower, there is a central depiction of one archangel, with St Zacharias on the left and St John the Baptist on the right. On the casket that Zacharias has in his hands, it is probably Daniel in the Lions' Den that can be seen, and at the sides there are two more figures and a not entirely articulated scene of the Adoration of the Magi.⁶⁶ In the wider fields at the sides of the windows, flanking the edges of the apse on the left is a representation of the Annunciation and on the right the Visitation. In the scene of the Annunciation, Mary is taken aback and innocently surprised; with the same conventional sign the girl in the Visitation (finger on lips) is rendered.⁶⁷ In an iconographic point of view the mosaic of the dome of the apse contains an accentuated Marian theme, that of Mary as Mother of God. Also belonging to this theme are the Annunciation and the Visitation, the isolated figures of Zacharias, John the Baptist and an archangel (probably Gabriel); this is one of the first depictions underlying the theological foundation of the doctrine of the Immaculate Conception. In Ravenna the scene of Mary and Christ comes only in the church of S. Apollinare Nuovo, but the exaltation of the Virgin is only hinted at,⁶⁸ while in the Euphrasian it is distinctly emphasised.

Shown to the right of the archangel in the apse are three figures that are a problem in iconographic terms. Two must have been martyrs, from the white robe, the garlands, nimbus, attitude and so on. In the centre is one more figure, but somewhat different. In his hands he has a book (a deacon?) and on his back a pallium of gold. The aureoles define them as saints, but if they were Poreč martyrs, they would be so designated with a caption, as Maurus himself

⁶⁵ Prelog 1986, T. 24, 32, 33, 34, 35, 36.

⁶⁵ Prelog 1986, Plate 24, 32, 33, 34, 35, 36.

⁶⁶ Prelog 1986, p. 30.

⁶⁷ Prelog 1986, Plate 25, 26; Cambi 2002, p. 297.

⁶⁸ Bovini 1957, p. 90.

a bočno se nalaze još dva lika te nedorečena scena Poklonstva kraljeva.⁶⁶ U širim poljima sa strana prozora, flankirajući rubove apside, s lijeve strane je prikazano Navještenje, a s desne Pohodjenje. Nedomicu i prostodušno iznenađenje iskazuje Marija u Navještenju, a istim konvencionalnim znakom i djevojčica u Pohodjenju (prst na ustima).⁶⁷ U ikonografskom smislu mozaik apsidalne kupole sadrži naglašenu marijansku tematiku, Marije kao Bogorodice. Toj tematici pripadaju i Navještenje i Pohodjenje, izolirani likovi Zaharije, Ivana Krstitelja i jednoga arkanđela (vjerojatno Gabrijela), a riječ je o jednom od prvih prikaza koji navješćuje teološku osnovu Marijina Bezgrješnoga začeca, U Ravenni se prizor Marije i Krista javlja samo u crkvi S. Apollinare Nuovo, ali je tek neznatno naznačena egzaltacija Bogorodice,⁶⁸ dok je u Eufrazijani ona izrazito naglašena.

Desno od arkanđela u apsidi su prikazana tri lika koji ikonografski predstavljaju problem. Dva su zacijelo mučenici, s obzirom na bijelu haljinu, vijence, nimbuse, stav i dr. U sredini se nalazi još jedan lik, no ponešto različit. On u rukama drži knjigu (đakon?), a na leđima ima palij zlatne boje. Aureola ih definira kao svece, no da je riječ o porečkim mučenicima, bili bi označeni legendom kao i sam Maur, a osim Maura Poreč nema povijesno zasvjedočenih mučenika ili konfesora. Prikaz prema Cambiju valja protumačiti kao radioničku shemu, kao uspostavu nužne ravnoteže u odnosu na likove na lijevoj strani, što je povijesno netočno, ali umjetnički opravdano. U bočnim apsidiolama nalaze se gotovo istovjetni prikazi. U lijevoj je Krist koji izranja kroz nebesko plavetnilo i podjeljuje mučeničke krune.⁶⁹ Mučenici su dva mlada čovjeka, dok su u desnoj apsidoli stariji ljudi, što pokazuju njihove sjedine.⁷⁰ Krist je prikazan različito, u lijevoj apsidoli je s dugom i ravnom kosom, bez brade, a u desnoj ima ponešto okruglije lice, s dugom, ali kovčavom kosom. U desnoj apsidoli Krist ne udjeljuje mučeničke vijence, nego se njegove ruke nalaze iza aureola svetaca. Zidni mozaici izrađeni su od raznobojnih kockica kamena i stakla. Mozaici su dosta dobro sačuvani, no potrebno je redovito pratiti njihovo stanje budući da se Eufrazijeva bazilika nalazi na UNESCO-ovu popisu svjetske kulturne baštine.

⁶⁶ Prelog 1986, str. 30.

⁶⁷ Prelog 1986, T. 25, 26; Cambi 2002, str. 297.

⁶⁸ Bovini 1957, str. 90.

⁶⁹ Prelog 1986, T. 15, 17, 18.

⁷⁰ Prelog 1986, T. 16, 19, 20.

is, but apart from Maurus, Poreč does not have any historically attested martyrs or confessors. According to Cambi the scene should be interpreted as a workshop scheme, the establishment of a necessary equilibrium as against the figures on the left, which is historically inaccurate, but justified in terms of art. In the side apsidioles there are almost identical depictions. In the left is Christ emerging through the heavenly blue and handing out martyrs' crowns.⁶⁹ The martyrs are two young men while in the right apsidiole are older men, as shown by their grey hair.⁷⁰ Christ is shown variously, in the left apsidiole he is young, with long, straight hair, beardless, and in the right he is still young but with a more rounded face, and long but curly hair. In the right apsidiole Christ is not sharing out martyrs' wreaths, but his hands are behind the halos of the saints. The wall mosaics are made of variously coloured tesserae of stone and glass. They are quite well preserved, but the condition needs to be regularly checked, since the Euphrasian Basilica is on the World Heritage List.

In Poreč, in the altar apse of the Euphrasian, on a high plinth as well as various kinds of semi-precious stones, mother of pearl is also used.⁷¹ Incrustation with varicoloured and precisely worked pieces of stone is called, particularly during the Renaissance and the Baroque, Venetian mosaic.

Although the Middle Ages were to make abundant use of frescos as the successors of mosaics, probably because of the cost of making the latter, it would seem that in our region too mosaic did not lose all its importance.⁷² According to the sources the Zadar church of St Chrysogonus had an apsidal mosaic in the 12th century, but the mosaics did not survive.⁷³ In the main apse is a scene of the Deisis, below which according to Byzantine iconography twelve apostles were shown. This is once again proved by Poreč with its ciborium over the main altar of the Euphrasian Basilica (1227), in which the Antique tradition, so rich in this building complex, created in the pre-Christian era, is expressed clearly and without any hesitation.⁷⁴

Medieval Zadar was created on the whole area of the ancient city, mostly preserving the ancient

⁶⁹ Prelog 1986, Plate 15, 17, 18.

⁷⁰ Prelog 1986, Plate 16, 19, 20.

⁷¹ Mano-Zisi 1964, p. 501.

⁷² Barral I Altet 1976, pp. 76-86.

⁷³ Buzov 1987, p. 382; Cambi 1995, p. 597.

⁷⁴ Rendić-Miočević 1965, p. 170.

Na visokom soklu u oltarnoj apsidi Eufrazijeve bazilike je, osim raznih vrsta poludragog kamena, upotrijebljen i sedef.⁷¹ Inkrustiranje raznobojnih točno obrađenih komada kamena, osobito u vrijeme renesanse i baroka, naziva se venecijanskim mozaikom.

No iako će se srednji vijek, vjerojatno i zbog skupe izrade mozaika, obilno služiti freskama, kao nasljednicama mozaika u dekoraciji crkvenih zidnih površina, čini se da ni tada mozaik nije sasvim izgubio svoje značenje, pa ni u našim krajevima.⁷² Prema izvorima zadarska je crkva sv. Krševana imala apsidalni mozaik u 12. st., no nije sačuvan.⁷³ U glavnoj apsidi nalazila se scena *Deisisa*, ispod koje je prema bizantskoj ikonografiji bilo prikazano dvanaest apostola. To također još jednom dokazuje Poreč, sa svojim ciborijem nad glavnim oltarom Eufrazijeve bazilike (1227. g.), u kojem se nesumnjivo i jasno odražava antička tradicija, tako bogata na tom građevinskom kompleksu, nastalom još u pretkršćansko vrijeme.⁷⁴

Srednjovjekovni Zadar nastao je na cijelom području antičkoga grada, najvećim dijelom čuvajući antički plan ulica. Na razvoj kulture grada posebno su utjecali benediktinski samostani osnovani u 10. stoljeću, sv. Krševana (*Grisogonus* ili *Chrysogonus*) i sv. Marije. Monumentalna trobrodna bazilika posvećena sv. Krševanu vrhunsko je postignuće romaničke arhitekture u Dalmaciji. Izgrađena je na mjestu ranije crkve i posvećena 1175. godine. Zidni mozaici bili su poznati iz izvora. U glavnoj apsidi nalazio se prizor *Deisisa* (s dvanaest apostola).⁷⁵

Na kraju možemo zaključiti da su staklo i staklena pasta u izradi mozaika kompleksna zadaća istraživača. Dugo se isticalo kako su se staklena pasta i staklo koristili za izradu zidnih mozaika, no istraživanja pokazuju da su se koristili i na podnim mozaicima, posebno kod izrade detalja, mozaičkih natpisa i dr.

Pri istraživanjima trebalo bi detaljnije obraditi staklene tesere, kako antičke tako i one srednjovjekovne, jer su i one važne u urbanom razvoju grada kao dio veće građevinske aktivnosti.

city, including the ancient street pattern. The culture of the city was particularly affected by the Benedictine monasteries of St Grisogonus or Chrysogonus) founded in the 10th century and of St Mary. The monumental three-nave basilica dedicated to St Chrysogonus is a supreme achievement of Romanesque architecture in Dalmatia. It was built on the site of an earlier church and was consecrated in 1175. The wall mosaics are known from the sources. In the main apse there was a scene of the Deisis (with twelve apostles).⁷⁵

At the end we may conclude that glass and glass paste in the making of mosaics constituted a complex assignment for research, since for years it was said specifically that glass paste and glass were used for the making of wall mosaics, and yet research has shown that glass paste and glass were used in floor mosaics, particularly for the working of details, mosaic inscriptions and so on. During further research, it would be necessary to consider in greater detail the glass tesserae, both Antique and medieval, for they are important for the urban development of cities and witnesses and a part of major construction activities.

(G. M.)

⁷¹ Mano-Zisi 1964, str. 501.

⁷² Barral I Altet 1976, str. 76-86.

⁷³ Buzov 1987, str. 382; Cambi 1995, str. 597.

⁷⁴ Rendić-Miočević 1965, str. 170.

⁷⁵ Cambi 1995, str. 597.

⁷⁵ Cambi 1995, p. 597.

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