

chovalé střechy s původní krytinou v Dolním Rakousku, které s touto oblastí přímo sousedí: Drossendorf – zámek (kaple a vstupní brána) či Kühnring – kostel sv. Filipa a Jakuba. Pokud je z čeho čerpat, nemusí být obnova při užití tradičních materiálů i postupů předmětem ztracena.

Obnovou střech hradu Grabštejna se v příspěvku na téma *Památková korekce střešního pláště hradu Grabštejn* zabýval arch. Miroslav Hanzl, autorizovaný architekt specializující se na opravu památek. Poukázal na vážné chyby z pohledu památkové péče při obnově střech hradního areálu. Pro krytinu byl zvolen naprosto nevhodný materiál, tzv. bonnský šindele na celoplošné bednění, jehož použití zcela proměnilo vzhled střešního pláště¹⁶ této památky. Po polovině 90. let 20. století se podařilo přesvědčit investora, Národní památkový ústav v Ústí nad Labem, a nastartovat nutnou korekci střešního pláště. Novodobá, nevhodná krytina z bonnského šindele byla postupně nahrazována krytinou z pálených tašek bobrovek. Součástí rozsáhlé korekce byla i obnova komínových hlavic, pouze novogotické zastřešení věže s měděnou bání a vrcholovou cibulí i přes její neautentičnost bylo ponecháno ve stavu z poloviny 19. století. Zdařilá obnova střešního pláště navrátila památce působivý výraz a stala se příkladem pro další obnovy podobně poškozených objektů.

Mgr. Lukáš Hejný, kurátor Sbírký stavitelství Muzea architektury a stavitelství NTM, závěr přednáškové části konference obohatil o příspěvek *Střechy a jejich krytiny ve sbírkách Národního technického muzea*. V úvodu zmínil historii vzniku Sbírký stavitelství, jejíž počátky spadají do roku 1911, s prvním sídlem ve Schwarzenberském paláci. Mezi první exponáty, které položily její základ, patřil např. soubor školních prací tesařských konstrukcí ze Státní průmyslové školy na Smíchově z roku 1924 – modely katedrály sv. Víta, Václava a Vojtěcha, kostela Nanebevzetí Panny Marie a sv. Karla Velikého na Karlově či Pražské brány; dále sbírky z pozůstalosti tesařských rodin apod. Sbírký stavitelství a většina archivu architektury včetně modelů byly později umístěny v přízemí bývalé invalidovny v Karlíně. Při povodni v srpnu 2002¹⁷ utrpěla sbírka velké ztráty, poškozen či zcela zničen byl soubor krovů z pozůstalosti Josefa Mockera, pracovní modely např. Staroměstské mostecké věže, Jutitiny věže či Křivokláta, školní klempířské práce, vazby krovu Černínského paláce z období první republiky nebo plech barokního pokrytí katedrály sv. Víta, Václava a Vojtěcha. V popisu filozofie současné Sbírký stavitelství ve vztahu k tématu konference přednášející Lukáš Hejný zdůraznil zejména autentičnost materiálů, zastoupení vzorků krytin, replik či modelů krovů, např. Horšov – kostel Všechny svatých,¹⁸ včetně největšího současného exponátu, kompletního barokního krovu hospodářského dvora v Podmoklech; z obytných staveb pak např. renesanční ležatou stolicí z domu v Jihlavě. Uvedl, že hlavním cílem Národního technického muzea v budova-

né nové expozici stavitelství v areálu národní kulturní památky Klášter Plasy¹⁹ v západních Čechách je prezentace postupů a principů tradičního stavitelství v duchu motto „Kdo zná, neničí“. V konečné podobě tato stálá expozice provede návštěvníka po celém areálu bývalého pivovaru a umožní mu seznámit se s problematikou historických materiálů, stavebních konstrukcí a technologií. Součástí expozice jsou i modely krovů, včetně prezentace základních spojů, vzorky krytin různých tvarů, druhů, materiálů a barev, vzorky střešních tašek, šindele, břidlice, doškové krytiny, dále prosvětlovací skleněné tašky, litinová krytina ze severní Moravy a další, to vše pro praktickou představu zejména školních žáků. V areálu národní kulturní památky vzniká tzv. Dům stavebních řemesel, ve kterém budou probíhat kurzy a workshopy zaměřené na poznávání tradičních postupů zážitkovým způsobem. Lepší pozvánka na závěr přednáškového bloku ani nemohla přijít.

V závěru dne se rozběhla bohatá diskuse, v níž se účastníci podělili o své mnohé negativní, ale i dobré zkušenosti z praxe. Nakonec přesto všichni optimisticky vyslovili naději v lepší zítřky při naplňování snah o řádnou obnovu kulturních památek, zvláště střech, které představují výrazný atribut krajiny našich historických sídel, fenomén vnímatelný každým z nás na první pohled.

Další den konference proběhly exkurze s odborným výkladem. Účastníci mohli znovu navštívit prostory významných pražských kulturních památek – Obecní dům s prohlídkou krovů i reprezentačních prostor s komentářem k okolním střechám z teras budovy; Loretu s prohlídkou včetně podkroví s novými nálezy historických konstrukcí a modely areálu; zvonici na Malostranském náměstí u kostela sv. Mikuláše s komentářem k vývoji plechové krytiny, hlásné služby a bydlení a s ukázkou černé kuchyně. Kdo chtěl, mohl se zúčastnit prohlídky Malostranské a Staroměstské mostecké věže s komentářem k okolním střechám nebo absolvovat procházku s výkladem k historickým střechám od Loretského náměstí k Pražskému hradu.

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■ Poznámky

¹⁶ Ibidem, s. 68.

¹⁷ Zasáhla téměř 8 % všech sbírek Národního technického muzea.

¹⁸ Jedna z nejvýznamnějších a nejceněnějších církevních staveb regionu západních Čech. Původně románský kostelík, přestavěný v gotice a baroku, s bohatou výzdobou.

¹⁹ Vzorový projekt památkové obnovy nazvaný Centrum stavitelského dědictví v Plasech byl za podpory Strukturálních fondů EU realizován od roku 2009 do podzimu 2015. Více o muzeu a projektu na <http://muzeum-plasy.cz/>, vyhledáno 4. 5. 2017.

Mosaic as an artistic type

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Keywords: mosaic, mosaic type, mosaic techniques

Mosaic is a term that we encounter surprisingly often. It expresses a basic natural principle according to which small particles are connected to form a higher meaningful whole. The resulting shape multiplies the energy introduced by each individual particle without completely negating their original autonomy. The art of creating mosaic images, based on this principle, has a thousand-year tradition and is spread throughout the world. The effort, work, and deep concentration needed for the placement of each stone remain in the resulting work, captured as a pulsating energy that is at the heart of its impressiveness. This article aims to introduce the mosaic technique and its basic outlines to the reader. It is supplemented with a glossary that focuses on the key concepts of this technology.

Illustrations: Fig. 1. Creative decoration of a grotto in Giardino Boboli, Florence; Fig. 2. University Library of Juan O'Gorman in Mexico City in 1952; Fig. 3. Example of precision work of the Florentine mosaic technique (*commesso in pietre dure*); Fig. 4. Example of secession wave of the structure and rhythm of tesserae – tesserae rectangular shapes from the visible side; Fig. 5. Opus sectile as currently processed (M. Kracik Štorkánová, Portrait of Agnes); the parts are adjacent to each other, but not as tightly as in the *commessa in pietra dura*; the joint is the visual element; Fig. 6. Olomouc Clock, detail with noticeable inhomogeneity; Fig. 7. Ceramic mosaic created by Antonio Gaudi using a technique called *trencadis*, Parc Güell, Barcelona; Fig. 8. Niki de Saint Phalle and Jean Tinguely, park Giardino dei Tarocchi, 1979. Photo: Magdalena Kracik Štorkánová, 2014; Fig. 9. Sample of seemingly flat and smooth creative decoration of the former department store U Nováků in Prague; Fig. 10. Example of direct technique in early medieval mosaic art, copy of Ravenna mosaics from a set created in the 1950's for the purpose of traveling exhibitions; Fig. 11. Eliška Rožáňová, mosaic from prefabricated crimped glass, 1980's; Fig. 12. Mosaic with St. Methodius installed on the facade of the cathedral of St. Peter and Paul at Vyšehrad in Prague (realization by Luigi Solerti); Fig. 13. Expressive technique – tesserae size, use of different materials, Nürnberg; Fig. 14. Sample of imitation painting in mosaic – the transposition copies not only the color but also the rhythm and the composition, mimicking the brushstrokes and evoking the impression of plasticity; Fig. 15. Head of Dionysus – sample of the emblem of Roman pavimental mosaics made in *Opus vermiculatum*; Fig. 16. Synthesis of the rhythm mosaic tesserae – detail of the eye, *opus vermiculatum*; Fig. 17. Sample of the color of Art Nouveau mosaic – exedra of the Municipal

House in Prague, detail of Apotheosis of spring, designed by K. Špilar; Fig. 18. Detail of the mosaic decoration of the facade of the former Provincial Bank, system of color swapping of tesserae and optical castings; Fig. 19. Sample of pixel processing by the artist by Space Invader, Vienna.

From the history of Czech mosaicism

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Keywords: Czech mosaicism, split glass enamel mosaic, stone structural mosaic, mosaic from pressed tesserae, history of inspired creation in Bohemia, art of the 20th century

Within the Czech lands, there are a large number of mosaics made in glass, stone, and ceramics. The oldest mosaic is the Last Judgement at the Cathedral of St. Vitus, Wenceslas, and Adalbert from 1370–1371, which remained an isolated work for a long time. In the second half of the 19th century, efforts to reconstruct it led to an increase in interest in the art of mosaics and also to the phenomenon of Czech mosaicism. The art of mosaics gradually emancipated in Bohemia and became very popular, so it may be aptly described as a “national” art.

In the first period, mosaic was mainly associated with the figures of mosaicist Viktor Foerster and architect Osvald Polívka. After the First World War, domestic glass enamels were produced and large orders were executed for the representation of the Czechoslovak Republic. In the 1930's, there existed several independent mosaic studios. The field of mosaic began to be taught at the School of Applied Arts in Prague and the Glass School in Železný Brod. The key personalities of the development were František Kysela, Marie Viktorie Foersterová, Josef Novák, Stanislav Ulman, Jan Tumpach, and Mikhail Ajvaz. The great artists of the time took part in the preparation of mosaic designs, including Max Švabinský. Czech mosaic was also successful in foreign exhibitions. After the post-war February coup, mosaic workshops were nationalized and merged under the title of the Artistic Crafts Center. Mosaics soon became the most popular instrument of political propaganda. They eventually managed to jettison their ideological content (although the ideology, of course, continued to be expressed through the artwork until 1989, as in all other art disciplines), and became one of the most progressive art forms in architecture. Mosaic once again successfully represented Czechoslovakia on the international scene. In addition to mosaic from split glass enamel tesserae, a specific form of stone structural mosaic and mosaic made of prefabricated pressed tesserae

developed. The method of paneling allowed for the further application of this art form.

After 1989, interest in mosaic as an art form decreased, and the system of support for public art ceased. Mosaic still bears the stigma of an ideological art form, leading to a neglect of creative works from the post-war era. The lack of qualified restorers and poor material availability is also a problem in protecting and preserving historic mosaics. The artistic type of the mosaic in itself and as a phenomenon of the Czech mosaic has not yet been sufficiently evaluated or appreciated.

Illustrations: Fig. 1. Prague, Cathedral of St. Vitus, Wenceslas, and Adalbert, Golden Gate, 1370–1371; Fig. 2. Viktor Foerster, Madonna of the church of Our Lady of the Snobs in Prague, 1903; Fig. 3. Osvald Polívka, Jan Preisler, facade of the house U Nováků in Prague, 1902–1903. Photo by Klauďie Debnárová, 2016; Fig. 4. František Kysela, Marie V. Foersterová, one of the seven mosaic friezes in the hall of the Ministry of Social Welfare in Prague, 1935–1936; Fig. 5. Marie V. Foersterová, Rudolf Kremlička, Bathing Women, detail, Phoenix Palace in Prague, 1930–1931; Fig. 6. Workshop of Jan Tumpach, designed by Josef Liesler, slab mosaic in the lobby of the Elementary School of St. Ursula in Prague, 1938; Fig. 7. Max Švabinský, Baptism of Christ, St. Vitus Cathedral; Fig. 8. Workshop of Jan Tumpach, designed by Jan Zrzavý, mosaic panels for the World Exhibition in Paris, 1936–37; Fig. 9. Karel Svolinský (realization ÚÚŘ), Astronomical Clock on the Upper Square in Olomouc, 1951–1952; Fig. 10. Jan Kaplický (realization ÚÚŘ), Homage to Glass, mosaic for glass exhibition at the Brussels Expo 1958; Fig. 11. Jaroslav Moravec (realization ÚÚŘ), Horoscope, 1957–1959, Pardubice train station building; Figs. 12 and 13. Vladimír Kopecký (cooperation ÚÚŘ), Paths of Water, 1971, Želivka water treatment plant; Fig. 14. Zdeněk Sýkora (realization Jablonec nad Nisou Glassworks) Composition, 1969; Fig. 15. Miroslav Hůra (mosaic workshop of ÚÚŘ), Cosmonaut, 1987, elementary school Pod Holoměřemi in Ústí nad Labem; Fig. 16. Jaroslav Šerých, Christ the Good Shepherd (detail), 1980, former Charity shop in Prague; Fig. 17. Eliška Rožátová, Across Continents, 1982. Catholic Theological Faculty of Charles University in Prague.

Glass mosaics from the late 19th to the middle 20th century – a contribution to the artistic topography of Moravia

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Keywords: Mosaic, Leopold Forstner, Viktor Foerster, Benedikt Škarda, Eugen Škarda, Otmar Vačkař, Albert Neuhauser

The oldest glass mosaics in Moravia can be found at the very end of the 19th century. Although we have little information regarding their origins, we can be nearly sure that they were imported from

the workshop Die Mosaikwerkstätte of Albert Neuhauser from Wilten near Innsbruck. These two Moravian orders, delivered by the company, supplemented Baroque church facades. They represent unique examples in Bohemia of what were otherwise common company productions. The older Immaculata was placed into the facade of the church of St. Peter and Paul in Rajhrad in 1895. The younger Marian composition, undoubtedly delivered by the same firm, supplemented the facade of a church in Tuřany near Brno in 1898. We can monitor Austrian mosaic imports in Moravia even after 1900, but these were already works from the Vienna artistic circuit. Perhaps for the first time in the context of Art Nouveau art, mosaics appear as part of the architectural decoration of the Psychiatric Institute in Kroměříž by Viennese architect Hubert Gessner. The Vienna Art Nouveau Association played a key role in the proliferation of the Art Nouveau style throughout Europe. This association also stood at the emergence of the workshops of the Wiener Werkstätte, whose sphere also includes artists who had the opportunity to present their Art Nouveau expression in mosaic works during their realizations in the Moravian environment. This group included the sculptor and designer Anton Hanak, the author of mosaic designs for the Primavesi family villa in Olomouc, as well as the significant mosaicist Leopold Forstner. His studio produced innovative compositions designed in collaboration with the most important masters of their time. Several of Forstner's works were delivered to Moravia. In addition to the extinct mosaic for the facade of the pharmacy U Bílého anděla in Opava, the mosaic decor on the facade of the high school in Bruntál and the decoration of the tomb of the Chiari family in Šumperk are notable. The epilogue of Forstner's mosaic work is St. Christopher, realized between 1933 and 1934 on the facade of the Church of the Corpus Christi in Slavonice.

A key position in the production of Moravian mosaics in the early 20th century was held by the Brno company of Benedikt Škarda. Founded in 1863, the company primarily specialized in glass fillings in church interiors and representative public buildings, but the portfolio also included mosaic works from flat and split glass. Many of the company's works were created in cooperation with the architect Dušan Jurkovič. In 1905 and 1906, they collaborated on the creation of a Calvary at Hostýn, the decoration of the Federal House in Skalica in Slovakia, and on Jurkovič's Villa in Brno. In 1908, this was followed by the decoration of Škarda's house in Brno, built from Jurkovič's project design. All these works were made from flat glass mosaic. The split material was used by the company for the demanding

figurative composition of the Peace Memorial in the middle of the Slavkov (Austerlitz) battlefield.

In Moravia, we also find several works from the founder of the first Czech mosaic workshop, Viktor Foerster. He was repeatedly employed here by the monastery in Nová Říše. In 1908, the abbot, Josef Karásek, ordered mosaic altar paintings for the newly built church in Rozseč. The next year saw the creation of the mosaic for the Nová Říše monastery church, no longer preserved today. In the mosaics, Foerster processed his own designs as well as the sketches of other creators. A number of works emerged in particular from a close collaboration with Benedictine Pantaleon Major, whose designs were used by Foerster in many variations. One of the versions according to Major's sketch for the Church of Our Lady of the Rosary in České Budějovice became a part of the decoration of the entrance to the Church of St. Mary Magdalene in Němčice nad Hanou. In contrast, the author created according to his own in Hostýn. Foerster worked on the composition of the facade of the local pilgrim basilica from 1911.

Several new companies followed on the original production of Škarda's Brno workshops, for which the glass mosaic technique was merely a supplement to their business. Škarda's shopmaster Jan Říha established his own "arts institute". Otmar Vačkař was more successful, who, after reversals, assumed control of Škarda's former company. His most famous mosaic work was the decoration on the church of St. Cyril and Methodius in Olomouc-Hejčín, where he delivered a large-scale compositional work to the presbytery. The work was prepared based on a design by Jano Köhler in 1932.

The issue of glass mosaic research in Moravia is still in its infancy. However, we can already list some of the specifics that primarily apply to the techniques and materials used. The strong position of the stained-glass company of Benedikt Škarda led to the evolution of a specific tradition of flat-glass mosaics here. Until the 1950's, mosaics from split material in Moravia were created exclusively from glass imported from abroad. The oldest mosaics from Albert Neuhauser's Mosaikwerkstätte company might be made from Italian material, perhaps from the glass production of the Tyrolean workshop itself. Viktor Foerster bought glass in Venice, and the mosaic material of Eugen Škarda and Otmar Vačkař probably has the same origin.

Illustrations: Fig. 1. Immaculata based on a design by B.O. Seeling, realized by the company of A. Neuhauser, church of St. Peter and Paul in Rajhrad, 1895; Fig. 2. The Tuřany Virgin, designed by J.L. Šichan, realized by the company of A. Neuhauser, church of the Annunciation in Tuřany, 1898; Fig. 3. Christ over the Chmelarz family

tomb, municipal cemetery in Prostějov, 1904; Fig. 4. Mosaic decoration of the entrance designed by A. Hanak, Primavesi Villa in Olomouc, 1912; Fig. 5. Extinct mosaic on the facade of the pharmacy U Bílého anděla in Opava, realized by L. Forstner, before 1912; Fig. 6. Clock decorated by mosaic, realized by the Wiener Mosaikwerkstätte (L. Forstner), high school in Bruntál, 1912; Figs. 7 and 8. Mosaic over the Chiari family tomb, realized by the Wiener Mosaikwerkstätte (L. Forstner), Šumperk municipal cemetery, 1912–1913; Figs. 9 and 10. St. Christopher, designed and realized by L. Forstner, church of the Holy Spirit in Slavonice, 1934; Figs. 11 and 12. Detail of mosaic of the XIII Station of the Cross according to the design of J. Úprka, realized by the company of B. Škarda, the Calvary near the church of Our Lady at Svätý Hostýn, 1905; Fig. 13. Ornamental decoration of a facade, designed by D. Jurkovič, realized by the company of B. Škarda, apartment building on Dvořák street in Brno, 1908; Fig. 14. Mosaic of St. Stephen blessing the Slovak people according to a design by M. Aleš, realized by the company of B. Škarda, Federal House in Skalica (Slovakia), 1904; Fig. 15. Golden mosaic background of the portal, realized by the company of B. Škarda, church of the Immaculate Conception in Brno, 1910–1913; Fig. 16. St. Phillip and St. James, realized by B. Škarda, church of St. Philip and James in Křadloveské Vážany, 1905; Figs. 17 and 18. Decoration of the facade of the home of Alois Kožušniček in Olomouc, realized by the company of B. Škarda, 1920's; Fig. 19. Mosaic in the interior of the Peace Monument on the battlefield of Slavkov (Austerlitz), realized by E. Škarda beginning of the 1920's; Fig. 20. Signature of E. Škarda on a mosaic in the interior of the Peace Monument on the battlefield of Austerlitz, beginning of the 1920's; Fig. 21. Virgin Mary of Hostýn, designed and realized by V. Foerster, Basilica of the Assumption in Svätý Hostýn, 1912; Fig. 22. Detail of a mosaic of St. Barbora, designed and realized by V. Foerster, church of the Sacred Heart of the Lord in Rozseč, 1908; Fig. 23. Victorious Christ, designed by P. Major and realized by V. Foerster, church of St. Mary Magdalene in Němčice nad Hanou, 1906–1907; Fig. 24. St. Anthony, realized by J. Říha, chapel in Lesné-Brno, second quarter of the 20th century; Fig. 25. Mark from the J. Říha company documenting the repair of the XIII. Station of the Cross on Svätý Hostýn, 1929; Figs. 26 and 27. Confiteor mosaic, design by J. Köhler, realized by O. Vačkař, church of St. Cyril and Methodius in Olomouc, 1932; Figs. 28 and 29. Decoration of cemetery cross, designed by J. Köhler, realized by O. Vačkař, municipal cemetery in Lužice, 1937; Fig. 30. St. Peter and St. Paul Pavel designed by J. Köhler, realized by O. Vačkař, church of St. Peter and Paul in Prostějov, 1941.

Stone mosaic – a creative technique with the longest tradition

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Keywords: stone mosaic, natural stone, Josef Novák, Martin Sladký

The article presents the development of stone mosaic from its ancient roots to the unique Czech modern tradition of structural stone mosaics. It describes the basic material and technological specifics of stone mosaic and provides an overview of the most significant Czech stone mosaics. It briefly introduces the work of the two most important Czech artists in this field, Josef Novák and Martin Sladký. In conclusion, it briefly outlines the issue of stone mosaics in terms of restoration and heritage care.

Illustrations: Fig. 1. Pella, Deer Hunt, end of the 4th century BC.; Fig. 2. Aquileia, Roman pavement mosaic, geometric motif opus sedile in the middle; Fig. 3. Rome, sample of floors using the Cosmatesque technique; Fig. 4. Moscow, ceiling mosaic in the Belorusskaya metro station, 1950's; Fig. 5. Vladimír Sychra, stone mosaic in the crypt of the Ležáky memorial, sketch 1948, realization 1990; Fig. 6. Prague, Vitkov National Memorial, stone mosaic in the Hall of Traditions, 1950–60's; Fig. 7. Radomír Koldář, Cultural and Political Blossom of the Czech lands and Prague in the 14th century, 1985, Prague, vestibule of Karlovo náměstí metro station; Fig. 8. Josef Novák, Shepherd, 1936; Fig. 9. Josef Novák, motives from works by Antonín Dvořák, 1950, hall of Třebízského Elementary School in Kralupy nad Vltavou; Fig. 10. Josef Novák, Industry welcomes school adolescents, 1950, entrance hall of the Třebízského Elementary School in Kralupy nad Vltavou; Fig. 11. Martin Sladký during the realization of a stone mosaic in the Memorial of the Anti-Fascist Resistance of the Kobylišká Shooting Range in Prague 8, mid 1970's; Fig. 12. Martin Sladký, stone mosaic at the Memorial of the Anti-Fascist Resistance of the Kobylišká Shooting Range in Prague 8, 1975; Fig. 13. Martin Sladký, mosaic on the facade of the Faculty of Civil Engineering CTU in Prague 6, completed in 1977; Fig. 14. Working on mosaic on the facade of the Faculty of Civil Engineering CTU in Prague 6, completed in 1977; Fig. 15. Sample of stone material suitable for the production of mosaic. Appendix 1. List of realizations of stone mosaics and combined mosaics with the use of stone created in Bohemia and Moravia in the 20th century.

A history of the glass image and its transformation over the centuries

Jana HÖFEROVÁ

Keywords: glass mosaic, wall mosaic, mosaic technique, glass paste, glass enamel

The article describes the development of the glass mosaic technique since when the first cubes of glass paste were used in the floor mosaic of the Roman masters in places where the color tone did not exist in natural material. The technique gradually improved and changed. Despite the decline in the period of iconoclasm and the diminution of style in the Renaissance and Baroque, when mosaic was merely a substitute for painting, it once again returned to the fore and is now a full-fledged artistic style.

Illustrations: Fig. 1. Sample of glass with metal wafer, 12–19th century, Museo di San Marco in Venice; Fig. 2. Mosaic of Christ-Apollo, Vatican necropolis, Rome, beginning of the 4th century; Fig. 3. Mosaic decoration of the ceiling of the church of S. Costanza, Rome; Fig. 4. King David and King Solomon, fragment of the original decoration of the Basilica of St. Mark, Museo di San Marco, Venice; Fig. 5. Tradizio legis, Basilica of St. Lawrence, Milan; Fig. 6. Weeping Women, fragment of original decoration of the Basilica of St. Mark, Museo di S. Marco, Venice; Fig. 7. Saints, fragment of original decoration of the Basilica of St. Mark, Museo di San Marco, Venice; Fig. 8. Mosaic from the Mascoli chapel designed by A. del Castagno, Basilica of St. Mark, Venice; Fig. 9. Glass enamel from the Orsoni glassworks; Fig. 10. Parrot drawn by two turtles, private collection, Rome; Fig. 11. Double indirect method; Fig. 12. Papilio machaon, mosaic created using the double indirect method.

The material distribution of glass mosaics, their degradation, and research methods

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Keywords: degradation of mosaic materials, glass mosaics, glass mosaic research methods, glass mosaic materials, glass mosaic techniques

The article is based on the practical and theoretical experience of both authors in the field of creative technology and ties into specific cooperation in mosaic research from the Czech environment.

In the article, the material distribution of glass mosaics and applied art techniques is put into context. The first part describes the characteristics of individual techniques and materials of glass mosaic (appearance or workability). It opens with classic split mosaic, followed by micromosaic, then the specific Czech innovations in glass mosaic techniques in the second half of the 20th century.

The second part is devoted to degradation and research methods of (especially) glass mosaics.

This is a list of possible mosaic degradation processes, both indoors and outdoors.

The degradation of mosaic lies in the penetration of the chemical composition of the materials used and the influence of ambient conditions (especially moisture). These factors significantly affect the degree of mosaic preservation and decide on future possibilities for repair.

The article concludes with a list of the possibilities of natural scientific research suitable for the material analysis of glass mosaics, including specific examples of glass tesserae analyses by the comparative method.

Illustrations: Fig. 1. Samples of basic shades of mosaic glass enamel acquired by K. Posoldová during the 1980's; Fig. 2. Details of the mosaic of St. John from the cathedral in Kwidzyn, demonstration of the use of historical glass tesserae – paste vitrae; Fig. 3. Detail of bathing women from a mosaic image in the Blaník passage of Palace Phoenix in Prague 1, realization by M.V. Foesterová according to R. Kremlička; Fig. 4. Sample of the composition of a golden background using tesserae executed with the conventional technology of fusing gold leaves between two layers of glass; Fig. 5. Detail of mosaic glass enamel of Czechoslovak production, realization of mosaic by ÚÚŘ, designed by V. Kopecký in the interior of the Želivka water tank; Fig. 6. Preparation of material for micromosaic in Vatican mosaic studies; Fig. 7. Jewel created using micromosaic technology, student work, Glass School in Železný Brod, mid-20th century; Fig. 8. Eve, realization by O. Žák, mid-20th century – example of use of lamp poles and other jewelry components in mosaic; Fig. 9. House sign on Těpešská Street, Železný Brod, technique of using jewelry components; Fig. 10. Sample of technique of prefabricated pressed glass cubes of different sizes; Fig. 11. Mosaic realized by Eliška Rožátová from glass prefabricated components, both industrially and hand-pressed; Fig. 12. Detail of mosaic made of sintered glass, Desná; Fig. 13. Mosaic from flat glass, hanging, realization and design by studio Oliva; Fig. 14. Examples of damaged surface of a mosaic. 14a – glass mosaic detail, comparing the effects of cleaning, below is a surface of the mosaic with a whitish haze caused by contact with chemically treated water, above after mechanical cleaning. 14b – Green tessera with corrosion products in the form of iridescence; Fig. 15. Detail of circular mosaic of the Weisel family tomb in the Dablice cemetery, Prague; the blue tesserae have a characteristic white coating – haze on the surface; Fig. 16. Detail of exterior mosaic where the microcracks in one shade of yellow glass enamel are visible; Fig. 17. Detail of interior glass mosaic with perceptible degradation of the turquoise tesserae; Fig. 18. Detail of badly damaged mosaic decoration of the Schicht family tomb in Ústí nad Labem; Fig. 19. Detail of “blown” part of the main theme of creative decoration of the church of Our Lady, beginning of the 20th century, České Budějovice; Fig. 20. Detailed view of a horizontal crack in the creative decoration of the gable of the former Archduke Stephen Hotel on Wenceslas Square, Prague 1; Fig. 21. Detail of grease and dust deposits on the mosaic in the interior

of the restaurant of Hotel Paris, Prague 1; Fig. 22. Mosaic from the Hotel Prague, dismantling in collaboration with the mosaic's author Eliška Rožátová; Fig. 23. Scheme of tesserae on a transparency.

RAKO ceramic cut mosaic – rediscovery of an extinct technology

Vojtěch PAŘÍK; Anežka PAŘÍKOVÁ

Keywords: ceramic mosaic, RAKO factory, Emil Sommerschuh, Jano Koehler

Emil Sommerschuh, the founder of the RAKO ceramic factory, opened up a completely new direction in mosaic art. The large-scale mosaic that was realized on the facade of Prague's Hahol in 1905 proved the possibilities of using this technology for architecture. Other important realizations were carried out in the Municipal House in 1911–1912.

Jano Koehler, however, was the one who perfected this technology. On the Calvary on Hostýn, the development of his work can be followed from 1912 to 1933.

The mosaic of the first station, “Pilate's Court”, which was in a disastrous state, was rescued in 2015 by the installation of the second original. This was created by sculptors Passionaria Parik and Vojtěch Pařík after six years of hard teamwork. They had to re-discover the defunct technique of working with liquid tesserae made of ceramic glazes in thick layers. The original co-author of the work, the RAKO factory, was also involved in this cooperation. The fired pieces of all ceramic segments were carried out in tunnel kilns in Podbořany using frost-resistant material. Architect Marek Houska created a special stainless steel construction to fit the second original in order to preserve the remnants of the original mosaic.

The RAKO factory also made the figural mosaics of Ladislav Šaloun on the facade of the Pojišťovna Praha and the specific interior decoration of Hotel Imperial.

Illustrations: Figs. 1 and 2. Jano Koehler, Tomb of Emil Sommerschuh 1926, Bubeneč Cemetery, Prague 6. Photo: Vojtěch Pařík, 2014; Fig. 3. Hostýn, Calvary. 11th station; Figs. 4 and 5. Jano Koehler, Hostýn, Calvary, 1st station “Pilate's court”. Condition before restoration; Fig. 6. The same, second original (Vojtěch Pařík, Passionaria Parik); Fig. 7. The same, drawn reconstruction of missing parts – Pilate; Fig. 8. The same, graphic reconstruction of the original sketch – the accusers; Fig. 9. The same, detail of the head of Christ; Fig. 10. The same, detail of the head of Christ – a graphical reconstruction of the original sketch; Fig. 11. The same, segments of the second original; Fig. 12. The same – applying fluid tessera; Fig. 13. The same, segmental crosscut –

the significant convex form of the glass tesserae is evident; Figs. 14–16. Karel L. Klusáček, *Allegory of Music*, ceramic cut mosaic, Federal House Hlabol, Prague 1, 1905; Fig. 17. Jakub Obrovský, *Harvest*, ceramic cut mosaic, Municipal House in Prague, 1911–1912; Figs. 18 and 19. Ladislav Šaloun, *decoration of the headquarters of the Pojišťovna Praha*, ceramic relief mosaic, Prague 1, 1906; Fig. 20. Hotel Imperial, ceramic mosaics in the café interior, Prague 1, 1913–1914.

Jan Tumpach and the path to Czech mosaic material

Zuzana KŘENKOVÁ

Keywords: Jan Tumpach, Michal Ajvaz, mosaic, glasswork, National Liberation Monument

The development of mosaic glass in the Czech environment, famous for its high-quality glass products, was one of the foundations of the First Republic's domestic industrial production. The Hradec Králové Glass Institute was involved in the promotion and support of the idea of "Czech Mosaics" since 1924. Attempts to introduce a stable mosaic glass production, however, were not initially successful. The call for Czech mosaic glass production was finally heard only in the early 1930's. The challenge was taken up by the builder Jan Tumpach, whose small specialized glassworks operating in Prague Záběhlce was able to quickly produce accurately split material in a sufficient range of color shades. A significant part of this was the results of experimentation by the glass technologist Michal Ajvaz (1904–1994).

From the very beginning, the optimistically developing business bet on well-established creators with whom they immediately combined their activities. In 1931, Tumpach's studio transformed two stills by Emil Filla into mosaics from the "new Czechoslovak mosaic material", although the workshop also worked from designs by Antonín Procházka and Jan Zrzavý. Cooperation with the Glass School in Železný Brod formed a separate chapter in Tumpach's activity, especially with Oldřich Žák, who introduced the teaching of muse art here.

The mosaic glass itself, together with an extensive advertising campaign and mosaic presentations at world exhibitions, contributed to the success of the company, closing a number of prestigious contracts in the 1930's. In cooperation with architect Kamil Roškot, a mosaic was created on the vault of the tomb of the Czech kings in the temple of St. Vitus. Between 1935 and 1939, Tumpach's company installed several figural compositions in the National Memorial on Vítkov. These were the mosaic image of the Song of Peace, designed by Jakub Obrovský, and primarily the decoration of the Hall of the Fallen, designed by Max Švabinský.

From 1935, the company worked on mosaics that were to replace the older wall paintings of Mikoláš Aleš in the lobby of the Old Town Hall in Prague. The sudden death of Jan Tumpach, however, interrupted the course of the last works. The company's mosaic activity was subsequently paralyzed by its former employees. Michal Ajvaz left the company, taking the documentation and recipes for the production of glass with him, and the artistic manager of the workshop Stanislav Ulman cost the studio the ongoing order in the interior of the Old Town Hall. Tumpach's company was unable to prevent the loss of trust, and the business did not recover its original renown. The premises of the factory were eventually rented for another use, and the supplies of the prized domestic mosaic glassworks were taken over by the staff of the mosaic workshop of the Center of Artistic Crafts. The final blow to the activities of Jan Tumpach's company came with its socialist successor.

Illustrations: Fig. 1. Placing glass tesserae into the cooling oven. Work in Jan Tumpach's workshop for the mosaic in the National Liberation Memorial in Prague; Fig. 2. Splitting cubes in the workshop of Jan Tumpach for a mosaic in the National Liberation Museum in Prague, 1937; Fig. 3. Advertisement for Jan Tumpach's company depicting work on the still lifes designed by Emil Filla, early 1930's; Fig. 4. Assembling a mosaic designed by Jan Zrzavý in Jan Tumpach's workshop, mid 1930's; Fig. 5. Czechoslovakian glass exposition at the World Exhibition in Paris, 1937; Fig. 6. Mosaic by Jan Zrzavý created by Jan Tumpach's workshop at the World Exhibition in Paris, 1937; Fig. 7. Mosaic of glassworks executed by Jan Tumpach's studio, designed by Oldřich Žák, Czech Savings Bank in Železný Brod, 1936; Fig. 8. St. Nicholas, created by Alois Klouda in Jan Tumpach's workshop, church of St. Nicholas in Benešov, 1938; Fig. 9. Mosaic designed by Jan Zrzavý on the tomb of Jan Tumpach, after 1937; Fig. 10. Max Švabinský in the studio of Jan Tumpach, refining the mosaic for the Liberation Monument in Prague, 1937; Figs. 11 and 12. Detail of mosaic designed by Max Švabinský at the National Liberation Museum in Prague, 1936–1938; Fig. 13. Signature of the mosaic in the National Liberation Museum in Prague, 1936–1938; Fig. 14. Test panel of a mosaic designed by Mikoláš Aleš in the Old Town Hall in Prague, 1937. Private collection.

Opus Pavimentum – historic lime mortar floors from the material perspective

Dagmar MICHOLINOVÁ

Keywords: floors, lime mortars, material composition of mortar

Floors prepared from lime mortars with air lime are still preserved in many of our heritage properties; at the same time, in many cases this may be a type of flooring that does not receive adequate attention,

thus making them vulnerable. This type of flooring may be described as an ancestor, and for so-called terraced (terrazzo) floors as variants of floors with mosaic decoration. This article provides basic information on the topic of the mortar of historic lime floors and introduces the reader to some examples of lesser known historic mortar floors.

Tying in with the already published results of the material research, it brings new results of the material research on the lime floor preserved at SH Švihov.

The article briefly introduces the basic characteristics of mortar floors, according to which this group of historical floor coatings can be identified, as well as basic information on the process of their documentation, sampling, and rescue.

Illustrations: Fig. 1. Period depiction of work processes during mortar flooring. The men sitting and working in a row perform the compaction of the layer of mortar with a basic flooring tool called a "fero da bater" in Italian, translated to "Iron for beating or compaction". The men on the upper left are grinding the surface of the floor with a specially modified stone block called "orso" in Italian, or "bear". Cutout of a picture from a publication by Giovanni Antonio Rusconi, Della Architettura, Venice 1660, an illustrated translation of Vitruvius' Ten Books on Architecture; Fig. 2. A mortar chromatically complicated floor of the Knight's Hall of Telč Castle, imitating marble treatment; Fig. 3. Example of Renaissance mortar flooring preserved and still used on the 1st floor of the Hvězda Summer Palace in Prague; Fig. 4. Detail of Renaissance mortar flooring in the Hvězda Summer Palace where it had been previously damaged by fire; Fig. 5. Crosscut of a fragment of lime mortar flooring of the castle in Lysice; Fig. 6. Pink color of the surface of the mortar flooring in the banquet hall of Švihov Castle is caused by admixing brick dust into the lime of the last (surface) layer of a stacked floor; Fig. 7. Broken fragment of the lime mortar flooring preserved at Švihov Castle; Fig. 8. Crosscut of a fragment of lime mortar flooring preserved at Švihov Castle; Fig. 9. Cut sample of the lime mortar flooring preserved at the Švihov Castle in polarized light.

Mosaics in monument care from the point of view of the restorer in the 21st century, focusing on the methodology of transfer of creative works

Magdalena KRACÍK ŠTORKÁNOVÁ

Keywords: transfer of mosaics, monument care, mosaic restoration, preservation, disassembly of artistic works of architectural surfaces

This article summarizes the practical experience and theoretical knowledge of the author concerning the methodology of the transfer of the specific technology of creative art.

The first part summarizes the basic historical

context which introduces the reader to the problematic transfer of mosaics. It continues with a focus on the basic methods of transfers, their technology, the advantages and disadvantages, and possibilities of utilization.

The second part of the article presents some of these methods in case studies of the transfer or disassembly of a specific monument. The transfer of the stone antique mosaic from the Florentine baptistery is presented, as is the transfer of the creative decoration of the tomb of the Pfeiffer and Král family from Jablonec nad Nisou, the dismantling of the mosaic of the Sun from the 1980's by E. Rožátová from the demolished Hotel Prague, and the dismantling of the mosaic in the segment gable of the tombstone of K. Sladkovský at the Olšany Cemeteries in Prague.

Illustrations: Fig. 1. České Budějovice, church of the Virgin Mary of the Rosary – research of the facade with creative decoration; Fig. 2. Silesian Ostrava, the wall of the central cemetery, detail with example of inappropriate additions of glass tesserae; Fig. 3. Sketch of a cylinder formed for transferring a mosaic in Bad Schandau (Saxony); Fig. 4. Aquileia, design of walkable bridges over the surfaces of a mosaic; Fig. 5. Sun mosaic by Eliška Rožátová from the Hotel Prague, demolished in 2014; Fig. 6. Prague-Malvazinky, Peluňek family tomb, surface of the underlying mortar – bed of tesserae after transferring using the strappo technique; Fig. 7. Drawing of stratigraphy in the transfer using the strappo technique; Fig. 8. Drawing of stratigraphy in the transfer using the stacco technique; Fig. 9. Tools used for transferring a mosaic; Fig. 10. Slab cut into the shape of the handling parts for the mosaic; Fig. 11. Jablonec nad Nisou, Pfeiffer and Král family tomb, mosaic detail, condition prior to transfer; Fig. 12. Ibid, detail of mosaic decoration, schematic of tesserae with color layout of the mosaic; Fig. 13. Ibid, substrate drawing serving as a guide for the reconstruction of missing parts of the mosaic and schematic of repeating ornament created in AutoCAD; Fig. 14. Ibid, application of white plasticine on the reverse side of the mosaic in areas where tesserae is missing; Fig. 15. Ibid, graphic diagram of preserved original decoration – red areas were intended for reconstruction; Fig. 16. Ibid, one of the four panels created for the installation of the original and reconstructed creative decorations; Fig. 17. Ibid, complete mosaic after installation; Fig. 18. Prague, Hotel Prague, detail of removal – dismantling of individual parts of the Sun mosaic by E. Rožátová during the demolition work; Fig. 19. Mosaic found in Vile de Benifaió (Valencia), the missing parts are filled in using different colored sands of different sizes; Fig. 20. Prague, Olšany Cemeteries, Karel Sladkovský Memorial: original appearance of the mosaic; condition of mosaic before dismantling in 2016, and condition with newly installed mosaic after restoration in 2017.

Reconstruction of the medieval statue of the Virgin with Child from the Malbork Castle Church and preservation of the mosaic at the Kwidzyn Cathedral

Marcin KOZARZEWSKI

Keywords: Malbork, Kwidzyn, mosaics, medieval art, Poland, Bohemia

The article presents two mosaic decorations created in the 14th century on the territory of the Teutonic Order: a foundation plaque from around 1380 situated on the southern facade of the Kwidzyn Cathedral and a monumental statue of the Virgin and Child on the eastern facade of the Malbork Castle Church. Malbork's Madonna fell in ruins in 1945. After years of effort, it was reconstructed in 2014–2016. This work has become an impulse to trace the complex history of both these works as well as to undertake the conservation of the mosaic in Kwidzyn, previously renovated in 1902. The article contains a report on the study and complex work with both monuments. The thread of the origin of the oldest glass from both mosaics of Prussia is analyzed. However, the question of whether we are dealing directly with the workshop which created the mosaic of the Last Judgment on the facade of the St. Vitus cathedral in Prague remains open.

Illustrations: Fig. 1. Kwidzyn, mosaic of St. John, condition before preservation; Fig. 2. Inventory drawing of the mosaic in Kwidzyn, done around 1870; Fig. 3. Kwidzyn, mosaic of St. John, part with the figure of the founder before and after conservation; Fig. 4. Malbork, eastern facade of the castle church with a statue of the Virgin and Child in a photo from 1939; Fig. 5. Ibid, castle church after World War 2; Fig. 6. Ibid, salvage of fragments of the destroyed statue of the Virgin and Child from the rubble of the church, around 1960; Fig. 7. Ibid, statue of the Virgin and Child, fragments of the surface treatment of the artificial stone; Fig. 8. Ibid, statue of the Virgin and Child, location of the individual fragments into a reconstructed sculpture: XIII – surviving fragment, head of the Madonna; XII, XI, X – not preserved; IX – fragment preserved in three parts; VIII – fragment preserved in three parts; VII – fragment survived in two parts; VI – preserved fragment, left side missing; V – fragment survived in two parts; IV – fragment survived complete; III – fragment preserved in three parts; II, I – did not survive; Fig. 9. Ibid, preparatory work for the reconstruction of the eagle motives on the mantle of the Virgin Mary; Fig. 10. The new face of the Virgin Mary in comparison to the original form on a black and white photograph; Fig. 11. Malbork, statue of the Madonna during conservation work in 1903 and the final touches after complete renovation in 2016; Fig. 12. Malbork, renovated mosaic statue of the Virgin and Child on the eastern facade of the castle church.

Material research of medieval glass mosaics in Malbork and Kwidzyn

David HRADIL; Janka HRADILOVÁ; Dana ROHANOVÁ; Magdaléna KRACÍK ŠTORKÁNOVÁ; Eva POSPÍŠILOVÁ

Keywords: medieval mosaic, Malbork Madonna, material analysis, non-invasive methods, degradation of glass

This article ties into the previous article by Marcin Kozarzewski "Reconstruction of the medieval statue of the Virgin with Child from the Malbork Castle Church and preservation of the mosaic at the Kwidzyn Cathedral". For this reason, the beginning only briefly mentions the historical connection between the creation of both works and the reasons for seeking their relationship to the Czech art environment of the 14th century. It then goes on to deal with the material and technological issues in detail. It selectively chooses and describes in detail those findings that may serve as a guide for the designation of origin of the works. Particularly, these are mostly imperceptible remnants of the original polychrome, among which a unique fragment of original gilding was found, then the glass tesserae of the mosaic itself. It finds the comparability with other parts, however, to be limited. In the case of the Prague mosaic, it is possible to rely only on older published data; comparing glass tesserae with the production of ordinary glass anywhere north of the Alps can lead to erroneous interpretations due to the specificity of the mosaic technology.

Illustrations: Fig. 1. Fragment of the statue of the Malbork Madonna from artificial stone with visible residues of mortar with incorporated glass tesserae (1a) below which residues of the original polychrome can be found, as seen in the detail (1b); Fig. 2. Cross section of a fragment of the original gold garment of the Malbork Madonna – in white light (2a) and in scattered electrons (2b); simplified description of the stratigraphy of layers: +1 fine grained gypsum base, +2 preparatory layer for gilding with minium content, bound with a protein binder (skin mucilage and egg), +3 damaged Zwischgold foil (with variable contents of Au and Ag), +4 mortar base for tessera casting (recrystallized calcium carbonate, quartz sand, other silicates, crushed bricks); Fig. 3. Historical tesserae from mosaic surrounding of the Malbork Madonna from greenish black (left) and dark red glass (right), in some cases, gold; Fig. 4. Historical tesserae from mosaic surrounding of the Malbork Madonna from blue glass, heavily corroded and often losing its color in the surface layers; Fig. 5. Correlation of contents of Ca and Sr in the Malbork tesserae and the mosaic in Kwidzyn (5a) and correlation of the contents of Fe and Mn in the Malbork tesserae (5b); Sr and Mn contents detected by the non-invasive method of mobile XRF can be used to easily distinguish historical (gothic and or Renaissance) and modern tesserae; Fig. 6. Comparison of the chemical composition of the glass in Malbork (squares)

and Prague (circles) tesserae, according to results published in different years; the color used corresponds to the color of the glass, the black asterisk corresponds to the average composition of medieval glass from the territory of Germany; **Fig. 7.** Detail of medieval mosaic in Kwidzyn in its current form; **Fig. 8.** White bone apatite particles and bubbles in the blue glass of type B in an optical microscope (8a) and the process of dissolution of added opacifier – bone apatite in the volume of glass in an electron microscope (8b); on the apatite surface there is a visible layer formed by the interaction of glass and apatite; the plate-shaped crystals in the glass volume represent the secondary crystallized wollastonite; **Fig. 9.** Corrosive layer on the surface of the blue type B tessera of thickness max. 100 microns created by the residual SiO₂ and by phases containing calcium and sulfur (probably gypsum), which is typical for the corrosion of exterior glass material; **Fig. 10.** The depth profile of potassium on blue tessera type B generated by spectral lines $\lambda = 766.5 \text{ nm}$, comparing measurements on two devices (A, B) – (10a) and calibration of this depth profile by measuring the depth of craters after 5, 10, 15, 20, and 25 pulses using a profilometer (10b).

Evaluation of the restoration of the mosaic floor of the minaret in Lednice, taking into account the transfers of the mosaic at the Synagogue in Čáslav and in the Cairn of Peace in Prace-Bрно

Josef ČERVNIKA

Keywords: Venetian terracotta, mosaic, restoration, reversibility, transfer

The article describes the restoration of the mosaic floors of the minaret in the park of the Lednice State Chateau, including the related technological problems. The transfer of the floor mosaic is confronted with the transfers of the glass mosaic from the synagogue in Čáslav and the glass mosaic in the Cairn of Peace. The transfer of mosaic floors in the minaret of the Lednice Chateau, which are an original part of the building, arose from the requirement of static stabilization of the building and affected the interiors of 8 rooms, where the floor was installed by a raised static reinforced concrete slab and a sandwich of transferred parts interlined with its raster in the floor area. The Venetian terracotta itself was thinned to match the layer of mosaic on the surface, thus losing its characteristic strength and physical properties for which it was used. In contrast, the mosaic transfer in Čáslav worked with an artifact added to the building when its function was significantly changed from a religious space of the extinct community to a municipal cultural space. The transfer responded to another functional change in relation to the restoration of the original appearance of the object to a memorial to the extinct community.

The mosaic was created secondary to the building and, after the transfer, found a new application in a public space where it was more suitable than in its original site. When transferring and re-installing the mosaic in the Cairn of Peace, this was a work that created an intact part of the interior of the building, like in the minaret floors. In both cases, the transfer was carried out to technically secure the building, and both works were transferred twice. The reason for the second transfer of the mosaic floors was the failed and unfinished transfer of the first, whose technical characteristics did not allow for the monument to be used for ordinary visitor traffic. With the mosaic from the Cairn of Peace, the second transfer was associated with the previous failed salvage of the building when the first transfer took place. The repeated transfer also brought reversibility issues, since its success was to some extent dependent on the reversibility of the technologies used during the previous restoration. If mosaics in the Cairn of Peace had been left in place without the transfer and masonry restoration, they likely would have been damaged. This also applies to the floors of the minaret, with the difference that the static construction could have been carried out in a different, less invasive manner.

Illustrations: Fig. 1. Lednice, interior of the minaret. Overall floor view after restoration; Fig. 2. Ibid, condition of the floor before the last restoration from 2015 to 2017; Fig. 3. Ibid, condition of the floor after the last restoration from 2015 to 2017; Fig. 4. Ibid, condition of the floor before the last restoration from 2015 to 2017; an example of a massive crack caused by static defects and the floor-to-floor joints related to the floor transfer in 1999; Fig. 5. Ibid, condition of the floors after the last restoration from 2015 to 2017; Fig. 6. Lednice, interior of the minaret. Condition of the floor before the last restoration from 2015 to 2017; Fig. 7. Ibid, condition of the floor during the restoration after the removal of cut stones from the surrounding joints created during the 1999 transfer; Fig. 8. Ibid, condition of the floor after the last restoration from 2015 to 2017; Fig. 9. Ibid, height ratios of the floor before the last restoration from 2015 to 2017; the illustrated elevation levels show, in addition to the missing parts of the floor and the split joints, the shape deformations of the individual sections; Fig. 10. Ibid, height ratios of the floor after the last restoration from 2015 to 2017; Fig. 11. Čáslav, facade of the synagogue, mosaic before transfer of the facade synagogue; Fig. 12. Čáslav, facade of the synagogue. Circular window after transfer of mosaic with restored tracery and stained glass; Fig. 13. Čáslav, facade of the Town Offices. Mosaic after installation on the facade and after adding new mosaic frame with inscription; Fig. 14. Prace, Cairn of Peace. Mosaic medallions before the beginning of restoration work; Fig. 15. Peach Cairn. Mosaic medallions after installation into a replica of the original aediculae. Fig. 16. Prace, Cairn of Peace. Detail

of mosaic medallion after installation. Photo: Eva Řezáčová, 2017.

Records of committees for cooperation between architectural and artist, and other sources for mosaic research in the public space of socialist Czechoslovakia

Zuzana KŘENKOVÁ; Vladimíra ŘÍHOVÁ

Keywords: mosaic, archival sources, enterprise Dřilo, Czech Fine Arts Fund, artistic committee, national enterprise Železnobrodské sklo, Center of Artistic Crafts

The study presents one of the options available for research of modern mosaic. In the autumn of 2015, the database “Topographic Research of Exterior Glass Mosaics in the Czech Republic” was made available to the public – a professional map focusing on their occurrence and damage. Almost half of the three hundred documented works originated from the 1950’s to the 1980’s. The primary part of the research was the identification of the mosaics. During the research, this proved to be much easier for older objects than for works of the second half of the 20th century, for which nearly all the basic information was missing. For part of the research, a closer look at the system of orders for artistic works in socialist Czechoslovakia offered a suitable solution. We used the inventories of artistic realizations in the public space, published between 1972–1989 under the title “Cooperation between artist and architect; a survey of works”. These cyclotype documents are not complete, but they still capture a large part of mosaic production from 1972. Data on older works (from the mid-1950’s) have to be sought out in archival sources, especially on the activities of the Czech Fine Arts Fund (ČFVU).

The archives of the realization enterprises of the time – the mosaic workshops of the Center of Artistic Crafts and the Železnobrodské sklo national enterprise – were preserved only in fragments. The mosaics must therefore be followed not through their creation in workshops, but through reports concerning the authors of mosaic designs and the approval of their works in the Art Commissions of ČFVU. The Czech Fine Arts Fund was founded in 1954 and was also responsible for the organization of official artistic orders. This practical activity was addressed by the “Fine Art Service” and the company of the ČFVU named Dřilo. Artistic realizations were approved by so-called (regional) artistic committees. They had different specializations, with mosaics approved in the Committees for cooperation between architect and artist.

At the beginning of an order, the committee recommended or approved the artist or would announce a competition for the creation of the work. They assessed, commented, and approved the various degrees of workmanship (often in the workshops) and eventually approved them on the spot. In the ongoing steps, even after the completion of the order, the committee's task was to approve the amount of the total fee and the distribution of payments for the individual phases of the work. During the negotiations, records of the meetings were produced which are now the basic written sources illustrating the creation of individual works. Entries are recorded in the record books or in typewritten descriptions. In addition, an important source of information are the folders for completed orders which include invoices, correspondence, and contracts with artists. Some works are documented in order portfolios which containing basic data on uniformly prepared cards containing the photo of the realization, the author's name, the name of the work, location, material, dimensions, and information on the price, investor, and date of final approval.

In the text, we use examples from archival sources – the now extinct mosaic on the eastern facade of the Na Šalamounce kindergarten in Peroutkova Street in Prague was designated as a work by Jaroslav Moravec from 1965 entitled Sun and Bird. We also describe the details of the order for mosaic tiles of the ventilation chimneys of the Letenský tunnel, designed by Zdeněk Sýkora (1968-1969), made of a mosaic produced in Jablonec nad Nisou. The detail of the documentation of one contract is demonstrated in an example of the extinct mosaic by Karel Svolinský, the Tree of Life (1977) from the interior of the elementary school in the Jižní Svahy housing estate in Zlín.

Socialist mosaics were realized primarily in two workshops, their archive funds having been preserved only in fragments. The fund of the Center of Artistic Crafts, as it relates to mosaics, has stored only promotional materials and annual reports, or several books of clippings from published articles. Also incomplete is also the fund of the Železnobrodské sklo national enterprise, whose mosaic workshop, working within the building glass department, was one of the other large producers of mosaic of socialist Czechoslovakia. Only promotional materials of the company, the business magazines Sklář and Sklo, jewelry, and especially sets of newspaper clippings are available for the study of mosaic. A fragment of the archive fund of the Železnobrodské sklo national enterprise is also kept in the Municipal Museum in Železný Brod. In addition to several

mosaic designs, it also contains remnants of writings (for the years 1966–1967 and 1971–1972). The Art Center of the Higher Industrial School of Glass in Železný Brod also dealt with mosaic production. Under the leadership of Jaroslav Brychta, the use of glass waste was tested and mosaic designs were created here. Some of them, along with Brychta's notes, are deposited in his estate at the Municipal Museum in Železný Brod.

Illustrations: Figs. 1 and 2. Advertising leaflet of the Artistic services of ČFVU Work, around 1969; Figs. 3–5. The extinct mosaic Sun and Bird, designed by Jaroslav Moravec on the facade of the kindergarten at Peroutkova Street in Prague, 1965; Figs. 6 and 7. Ventilation chimneys of Letná tunnel in Prague, tiles designed by Zdeněk Sýkora, realized by the Bižuterie Jablonec nad Nisou national enterprise, 1968–1969; Fig. 8. Workers of the mosaic shop of the Center for Artistic Crafts in Prague completing a mosaic designed by Ludovít Fulla for the World Exhibition in Montreal, 1966; Fig. 9. Eliška Rožátová in the mosaic studio of the Železnobrodské glass national enterprise finishing a mosaic for a department store in Rožnava in Slovakia, 1968; Fig. 10. Work in the mosaic studio of the Železnobrodské sklo national enterprise, mid 1950's; Fig. 11. Work in the mosaic studio of Železnobrodské sklo national enterprise on a mosaic from pressed glass elements for a nursery in Železný Brod, mid 1950's; Fig. 12. Design of a house sign by the Železnobrodské sklo national enterprise, 1953; Figs. 13 and 14. House sign of an apartment building on the Benešovo nábřeží in Zlín, realized in Železnobrodské sklo national enterprise, 1953; Fig. 15. Design by Antonín Drobek for a mosaic, 1950's; Fig. 16. Design by Antonín Drobek for a mosaic in a Cultural House in Loužnice, realized by the Železnobrodské sklo national enterprise, 1950's; Fig. 17. Design for a house sign and grille using compressed mosaics, designed by Jaroslav Brychta and Jaroslava Zahradníková Brychtová, 1950's; Fig. 18. Prototypes of a cement mosaic lining, designed by Antonín Drobek and Jaroslava Zahradníková Brychtová, 1950's; Figs. 19 and 20. Documentation of a finished order – mosaic by Ladislav Lapáček for the Brná Spa in Ústí nad Labem, 1981; Fig. 21. Documentation of a finished order – extinct mosaic by Miroslav Hroua for a kindergarten in Teplice, 1981; Fig. 22. Card of a finished order – Tree of Life mosaic designed by Karel Svolinský for the elementary school at Jižní Svahy in Zlín, 1977; Fig. 23. Extinct Tree of Life mosaic, designed by Karel Svolinský for the elementary school at Jižní Svahy in Zlín, 1977.

The work of the Italian mosaicist Sauro Ballardini in Prague

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Keywords: mosaic, Ravenna, Prague, AVU, Sauro Ballardini

The purpose of this article is to recall the work of the Italian mosaicist Sauro Ballardini, who lived in Prague from the late 1950's to the early 1980's, where he worked at the Academy of Fine Arts (AVU) and devoted himself to monumental mosaics. His work is an integral part of the history of this art technique in Bohemia and is a special connection between the period requirements for the creations of local public artistic works and the knowledge that the artist brought with him from Italy.

Illustrations: Fig. 1. Sauro Ballardini (Andrea Sarto), statement of study at the Academy of Fine Arts in Prague, 1957; Fig. 2. Sauro Ballardini (first on left) and classmates in the studio of the monumental painting by Prof. Vladimír Sychra at the Prague Academy of Fine Arts. In the background in the center, the Marcinelle mosaic is visible; Fig. 3. Oldřich Opl and Sauro Ballardini, Battle at Sokolova, 1974, Florence metro vestibule; Fig. 4. Sauro Ballardini in the studio at the Academy of Fine Arts while working on a mosaic for the Battle at Sokolovo at the Sokolovská metro station (today Florenc metro); Fig. 5. Studio of Prof. Oldřich Opl t the Academy of Fine Arts during the realization of the mosaic of the Battle at Sokolovo for the Sokolovská metro station (now Florenc metro); Figs. 6 and 7. Sauro Ballardini, modelletto for the Motol hospital in Prague, late 1970's; Fig. 8. Giuseppe Pellizza da Volpedo, The Fourth State, 1901, oil on canvas; Fig. 9. Sauro Ballardini, Victorious February (?) detail, late 1970's, location unknown; Fig. 10. Sauro Ballardini, Victorious February (?), late 1970's, location unknown (Mělník?); Fig. 11. Sauro Ballardini in the studio during the realization of a detail of the Victorious February mosaic, late 1970's; Fig. 12. Sauro Ballardini, Humanity Turning to Space, 1979, former Central Telecommunications Building, Olšanská Street, Prague 3; Fig. 13. Sauro Ballardini in his studio, late 1970's, Jana Zajíce Street no. 24, Prague; Fig. 14. Sauro Ballardini, Mosaic for the building of the World Trade Unions Federation based on a drawing by Pablo Picasso, 1979, Vinohradská Street, Prague 2.