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WOOD CARVING, ICON PAINTING, AND METAL ADORNMENTS IN THE CHURCH ST.SAVIOR [SV. SPAS] IN SKOPJE AS A UNITED CONSERVATION COMMISSION

Key words: *united conservation, nineteenth-century iconostasis, Church St. Spas in Skopje, wood carving, icons, icon revetments.*

Abstract: *This research contributes to a better knowledge of techniques that emphasize the solemn note of the iconostasis, regarding the processes of carving, icon technology, metalworking, ways of decorating and gilding that enhance the unique impression of the lace whole, which are part of a conservation study dedicated to applied art on the iconostasis in the Church of St. Spas in Skopje, known as a significant cultural monument. Previous conservation works and other indicators of conservation improvement will be a signpost in preventive conservation, prophylactic care of cultural monuments, the way in which they are currently maintained and preserved in ambient church conditions. Characterization of techniques multiplies participation in further research and stylistic inclusion of differences over time.*

Introduction

The artistic style of the Macedonian Revival, characterized by flora and fauna, as well as geometric patterns and their fractals[1] abounds in the vitality of the traditional domestic heritage, spreading the national excitement as a celebration. The unification of three craft guilds, expanding their artistic spirit of the entire iconostasis during the renovation[2] of the Church of St. Spas in Skopje[3] in the XIX century, when the best masters: Mijak woodcarvers[4], Dicho Zograf[5] icon painter and the famous Skopje guild of silversmiths[6], were engaged as performers and donors, made their work recognizable. Their indicated honor, self-confidence around their performance, showing the public their mastery in relation to one of the most important and old churches in the city region in the popular old Skopje bazaar, where trade and mass circulation of the crowd were most intense[7]. The Church of the St. Spas[8], located in the eastern area of the Skopje[9] under the fortress Kale, built in the middle of the 16th century on the foundations of an older place of worship[10], is distinguished by its carved iconostasis (1824) with motifs from the Holy Scriptures, richly decorated with various floral and zoomorphic decorative elements and numerous figurations of people.

Horizontally divided into pedestals, bearers of throne icons, architraves, attics and acroteria, it is decorated with carvings in several techniques. Throne icons, for the most part, were made together with the iconostasis and on two of them, there is an inscription with the name (1823) of the painter and the doner

[1] S. Jablan et Lj. Radović, "Clasification of Ornaments", in: *Memory Update - Ornaments of Serbian Medieval Fresc*oes, Ed. D. Milovanović, Beograd, 2013, 69-99.

[2] В. Р. Петковић, "Стари српски споменици у Јужној Србији", in: *Гласник професорског друштва*, књ. V, свеска 4, (Скопље), 1925, 177.

[3] Т. Арсовски, „*Стара скопска чаршија"*, Скопје, 1971, 21

[4] Д. Ќорнаков, *Творештвото на мијачките резбари*, Скопје, 2012, 12-14.

[5] Ц. Грозданов, *Уметноста и културата во XIX век во Западна Македонија*, Скопје, 2004, 9-12,78-93.

[6] Ј. Хаџи Васиљевић, *Скопље и његова околина*, *историска, етнографска и културно политичка излагања*, Београд, 1930, 88.

[7] More for the population growth through the development of newly built facilities, cf. Т. Арсовски и Н. Ташковска-Арсова, *Прилози за урбаната историја на Скопје од XIX и почетокот на XX*, Скопје, 1988, 7.

[8] Н. Никуљска, *Црква Св.Спас Скопје*, Скопје, 1981, 5-6.

[9] М. Костић, „Град Скопље и његов историски значај током векова", in: *Гласник професорског друштва*, књ. V, свеска 4, (Скопље), 1925, 186-192.

[10] П. С. Јовановић, „Знаменитости у Скопљу", in: *Гласник професорског друштва*, књ. V, свеска 4, (Скопље), 1925, 198.

Fig.1-Samples details of flower ornamentation on the carving, iconography, and metal halos (Photos by the author)

from 1867. Above the throne icons is a thin wreath wrapped in rope, which separates the throne icons from the embossed lower frieze. Ten small fields (*ќитабиња*), under the ten throne icons, are richly sculpted from various scenes in addition to the updated pillars and lunettes presenting the most carved part of the iconostasis. The iconography varies with ornaments and from there the entire iconostasis, decorated clothing, applied metal halos fit into the huge applied art of arabesque - lace in which no part of the pattern, skills, or crafts are left unprocessed (Fig.1).

After the catastrophic earthquake in Skopje,1963 the Institute for the Protection of Cultural Monuments of Skopje and the Republic Institute for the Protection of Cultural Monuments in Macedonia took measures to rehabilitate and restore the damaged Church St. Spas in Skopje. In addition to the architectural protection of the object, disinsection was performed in 1972/75 and cyclonization in 1988 with methylene bromide, after which the conservation of the wood carvings was carried out. Meantime, from 1975/6 to 1977 the conservation of icons was conducted in two phases. During the long duration, various damages occurred under the influence of moisture and the fracture of the upper left arch on the Royal Doors caused by the carelessness of the church party, which encouraged further conservation treatments 2019-2020[11] alongside with the conservation processes on the carving, the conservation of the 4 throne icons, northern Royal Door and metal decoration, during which the standard conservation procedure was faced with the treatment of the previous repairs.

Iconostasis

The iconostasis was built for longer period of time[12]. It is made by the famous Mijak carvers masters Petre Filipovski - Garkata and Makaria Negriev Frčkovski. These carvers have performed together several iconostases throughout the Balkans[13]. The

[11] Archival documents, correspondence, architectonic projects, conservation reports on the church of St. Spas in Skopje kept in the NI National Conservation Centre – Skopje: *Извештај по земјотресот*, Бр.01-139/1, 12.X.1963/01-701/1; 13.III.1964, *Извештај за конзервацијата на резбаниот иконостас во* црк.Св.Спас во Скопје, Бр.07-292/2, 3.II.1976; *Извештај за дезинфекција од Заводот за хигиена-Скопје*, Бр. 07-292/3,10. II.1976; *Извештај за извршена фумигација* Бр.01-224, 28.III.1972 и *Извештај за изведена фумигација* 07-4644, 21.3.1977; *Записник за извршениот прием на изведени работи од непосредна заштита за проектот Конзервација и реставрација на 40 икони и иконостас од црквата Св.Спас во Скопје* (Бр.11-68/14 од 16.09.2016).

[12] More about the dating of the carved iconostasis in the church St. Spas in Skopje, cf. Д. Ќорнаков *op.cit.*, 12-14.

[13] Д. Ќорнаков, *Творештвото на мијачките резбари*, Скопје, 2012, 44-55; З. Личеноска, „Македонската

Fig. 2 - The type of damages and the processes of conservation on the iconostasis:

a)-iconostasis damages; b),c)-cleaning of the accumulated dust using vacuum cleaner; brushes with neutral soap; d)-fumigation chamber; e)-injected insecticide on the front and backside of the iconostasis; f)- removing moldings for coating access; g)- finishing with a protective coating (Graphical documentation, source NI Conservation centre-Skopje, Photos by: Pero Gerasimov)

iconostasis serves as a stable support for icons and marks the boundary between the nave and the altar. Constructed from oak wood and the carvings are made of walnut wood. The iconostasis is not of the flat type, but the intersection of its placement on the ground (*тлоцрт)* moves with certain architectural refraction in the middle part, besides the end parts of the north and south wing in the refraction of 90° degrees. It is placed on 14 wooden pillars that are part of the architecture of the iconostasis and it is attached to two architectural pillars that stand behind the iconostasis with the intention to integrate its spatial arrangement and stability. In the altar space on the inside, there are two auxiliary chairs, with mobile seats, with folding. The iconostasis construction is 10m long, 4.50m high with the middle part of 7m height.

Carving is performed in several techniques: shallow, deep (up-to-date), and undercut. The iconostasis abounds in various motifs derive from the texts of the Holy Scriptures[14], representing figurations of a mul-

црковна резба во XVII и XIX век“, *Гласник на Етнолошкиот музеј*, Скопје, 1960, 106-110, 117-128.

[14] Р. М. Грујић, „Дрворез Св.Спаса и Св.Богородице

titude of human figures, self-portraits of the iconostasis performers dressed in Mijak folk costume, and forms: symbolic-decorative (birds, vines and grapes, sun motifs), vegetative (flowers, leaves, branches, fruits, buds), shaped (goblet with flowers, ribbons, medallions, pearls or beads), zoomorphic (animals, birds), forms of architectural-construction nature (sacred object architecturally transformed as part of the interior). The joints of the carved plates are fastened with metal forging wedges to the wooden structure of the iconostasis.

Iconostasis Damages

We recognize numerous human-caused damages as mechanical and violent actions, which reflected on the current image of the iconostasis with missing parts: 29 angel heads in the area of the parapets' pillars each fastened with wooden pegs, then two profiled slats on the north side in the pedestal zone of the first pillar, the crown on the north and south side on the broken part of the iconostasis; and some parts of the iconostasis construction or carving. Other damages refer to burned surfaces on the northern upper parapet plate; then, lime caps evident on the contact surfaces with the walls and ceiling; grease along the lower profiled strip which covers the parapet boards and pedestals of the columns, the carved vases that are the supports of the undermined-modeled columns; the presence of insecticides and fungi on the basement and cracks due to dryness (Fig.3-a).

Conservation

The last conservation of the iconostasis was done after a twenty-year break, which does not go in favor of the continuous maintenance of the wooden iconostasis. Therefore, conservative interventions performed on several occasions were necessary to reduce the consequences of improper maintenance and negligence, which should normally be applied with ongoing interventions and inspections every three to five years. The last executed conservation of the iconostasis (2019/20) was carried out simultaneously on both sides, from the averse and the reverse side, in different phases and dynamics. The preparatory phase took place in partial locations that stand out according to the type of drastic damage that was treated which acquired certain protection materials in order to stabilize the wood mass.

The inspection showed that there are dense deposits of different nature, which required cleaning of the accumulated dust with vacuum cleaners and soft brushes in various shapes and sizes (Fig.2-b,c) then by applying a neutral soap (Marseille). The percentage of active substance in the aqueous solution varied depending on the amount of accumulated dust, grease and carbides. The cleaning itself was performed with brushes and soft absorbent fabrics that aimed to absorb moisture as part of the solution, which reduced the penetration of distilled water into the wood mass. This is important due to the presence of a high prevalence of tangentially cut wood, knowing that the percentage of shrinkage of such cut wood mass ranges from 5-12%, with the possibility of causing side effects[15]. It should be emphasized that the balance in the wood mass depends on the saturation (the condition of the wood that has lost its free water but has retained hygroscopic-trapped water) and thus would not change the dimensions or volume of the wood. Water absorption is of great importance in impregnation and protection of wood because a huge number of protective agents are used mostly as aqueous solutions, and the degree of absorption depends on the type of wood, method of cutting, amount of present moisture, room temperature, so the whole process cannot be linear, nor equally applicable across the entire surface of the iconostasis. Measurements show that there is a higher presence of moisture in the contact zones with the floor and walls, ммeasured over several measuring points from the base to the Great Cross, indicating an increase in temperature in higher areas and a decrease of the percentage in humidity and vice versa[16].

A lot of accumulated fat, mostly from the handles, was cleaned several times with an aqueous alcohol solution by using soft brushes and absorbent napkins. The charred and burnt wood regions were treated with a 3% Paraloid B72 solution to become strengthen enough and achieve the hardness closely to the surrounding wood. The regions with the visible presence of insecticide openings were injected several times with a solution of „Chromocid" (Chromos-Zagreb) and xylene (Fig.2-e). Lime deposits were cleaned in some places with distilled water and in other places with a compress of distilled water and ethyl alcohol.

In the final part of the preparatory phase, the entire wooden iconostasis was covered with a solution (insecticide + water) which was injected in order to enable better penetration of the second protective

у Скопљу", in: *Гласник Скопског научног друштва,* књ.V, (Скопље), 1929, 195-197.

[15] Due to the absorption of moisture and water, which occurs first in the cell cavities, and later in the intermediate cavities, cf. Б. Пејковски, *Технологија со преработка на дрвото* (*Основи на технологијата на дрвото)*, Скопје, 1966, 139;

[16] A. Popovska, "Indoor and Outdoor measurement of the "T" and "RH" and climate impact on the cultural heritage in the church of St. Spas in Skopje", in: *Patrimonium Mk*, 14/19, Скопје, 2021, 349, 353.

layer, at the same time equalizing the percentage of moisture. Excess solution spilled on the surface was wiped off with an absorbent soft cloth. The choice of the aqueous solution required a neutral solution that would not change the pH value of the wood. Its penetration into the intermediate cavities in contact with the hygroscopic trapped water from the wood together with the oil creates a semi-polymerized environment that provides a higher percentage of elasticity of the wood mass while minimizing the penetration of atmospheric moisture from the air.

After a certain duration of the previous preparatory phase for stabilization of the wood mass, preconditions were created for controlled penetration of the preservative "Belbor Fix" (Belinka, Slovenia) in combination with linseed oil in a ratio of 70:30 and in some places 50:50 in diverse percentages for various positions of the iconostasis due to the presence of different percentages of relative humidity and temperature of the wood (Fig.2-g). The preservative was initially used as a means of producing a state of fumigation in an isolated and closed space, in an environment in which evaporation will occur. For this purpose, the entire iconostasis, on the averse and reverse side, was insulated with nylons, interlocked, and stapled at a short distance in order to create a kind of chamber that was supposed to keep the evaporation inside (Fig 2-d). If necessary, there was another layer satisfactory for elastic properties, important for tangentially cut wood, which is mainly present on the iconostasis. The characteristics of wood that is prone to cracking due to its frequent expansion and contraction, with the addition of oil allow it a certain elasticity and thus eliminate future damage in the form of cracking, the entry of atmospheric moisture, as one of the main causes of wood damage. Contacts of wooden construction with the floor have been treated several times with a preservative within a higher percentage of linseed oil, mainly due to the increased humidity in the lower zones of the iconostasis.

Reconstructing fragments on the Royal Doors

During the liturgical processions (with the given permission for performing it on the feast of St. Spas), due to the wrong manipulation with the doors, damages occurred in the left arch of the Royal Doors[17] in the form of fractures, landslides, and falling fragments (Fig.2-h). Impaired functionality and compactness of the disintegrated upper zone, including the presence of insecticidal holes, resulted in remains divided into two groups: fallen and broken three (3) relatively large carved fragments and other fifteen (15) smaller ones. During the analysis, we also recognized some old reparations (Fig.4-a) that were previously settled on the carved parts of the upper notch on the semicircular arch in a form of rectangular sections of hardwood plywood which were glued and fastened with metal screws.

The wing of Royal Door is made in a combined shallow, updated carving technique, which in some parts has modulation and undermining. The carving is gilded and performed on an orange bolus. The carved, S-shaped plate is followed by a profiled strip as an application in the lower zone. The reconstruction was performed with the use of adhesives materials with properties and characteristics of stability, elasticity, and durability to successfully create a complementary bond with the wooden surface. In that direction, a non-ferrous metal-aluminum sheet (2 mm) was used because of its peculiarities in terms of annulling the further corrosion of the wooden surface and preventing further destruction (decomposition) of the wooden tissue. Two-component epoxy adhesives with the addition of metal dust (stainless) are used as a detoxifying filler.

First, the technical draft documentation, by analogy from the previous state, was prepared for performing the total reconstruction, which would restore its authentic iconostasis procedural function (Fig.3). The parts of the carving that had to be reconstructed were of the type of updated carving, as well as other individual parts of the carved surface that overflow into undermined carving. Such modeling is common in the practice of carving, which enables further trapping of plasticity by applying a combination of these two carving techniques. Therefore, the conservation approach had to focus on specific contact surfaces that would allow the connection between the stable support and the fragments and their placement within the plasticity, modeling the up-to-date carving. Baroque-style modeling in the concave-convex movement of the S-line, in order to be reconstructed, had to be followed through three documentary drawings and their overlap, which would prevent such a rigid appearance of the carved plate or, from a protective point of view, prevent its further violation. By satisfying these presuppositions, the mechanical peculiarities of the wood as an integral part of the carved surface as well as the aesthetic-plastic impression are satisfied at the same time.

According to documentary analyzes, the aluminum sheet itself is modeled along the wood mass line, and its cutting is done according to the reconstructive drawing (Fig.4-b,c). By tapping, the cut aluminum is modeled in accordance with the S curve of the carved plate. The surface on which the molded aluminum is placed, especially on the contact parts of

[17] Historical information about the Royal Doors in the church of St. Spas, cf. D. Kjornakov, *Pearls of the Macedonian Woodcarving*, *Royal Doors*, Skopje, 2009, 64,113.

aluminum with the wooden surface, is first cleaned, degreased with ethyl alcohol, and rectified turpentine in a ratio (2:1) to be further saturated twice with 4% solution (Paraloid B72 dissolved in toluene) to become a stable base. Also, insecticidal wormholes are injected and filled with liquid paraloid putty, a viscosity of yogurt, in order to harden them and create the strength of the wood mass as a precondition for joining in the process of reconstructive placement of fragments. The parts that did not have a suitable contact wooden surface, were upgraded and then cut into the rear profile, in the channel of which aluminum joints were placed, which aimed to connect the two fragments. These metal parts are further processed along the contact surface modeling line. Such detailed processing, with special attention to every detail, enabled an opportunity for the reconstruction of every smallest fragment, while providing sufficient elasticity as a condition for restoring the function of the door. Closing the holes and saturating the wood compound of each fragment separately (with injected paraloid solution) created a complementary base to the extent to produce further possible adhesion with another adhesive-epoxy resin applied to the aluminum surface.

Reconstructive connection on the left arch of the Royal Doors

Checking the condition of the wood mass required the use of composites with an oily component in the solution as a preservative. It is known that in the process of oxidation and polymerization of oil, we have semi-polymerization (incomplete state of its hardening), but also prerequisites for accelerating the disintegration processes on cellulose in wood tissue which can cause unwanted damage. Equilibrium conditions in the cell structure, volatility, and characteristics of the wood, porosity of the wood mass, all require a series of protective determinants necessary for the protection of the medium and its artistic content.

The couplings are 2 and 3 mm thick, made out of the aluminum sheet, and are shaped in the form of a truncated circle in a tangent. Their dimensions are not standardized and therefore depend on the size of the modeled region. The sizing is performed in relation to the wood mass along with the X and Y coordinates in a ratio of 1:3 (or 1:3 per X and 2:3 per Y) for the coupling in relation to it. If the dimensions of the wood mass are larger, then they engage in their parallel placement or shifted parallel movement in a case of irregular violation.

A number of synthetic resins (epoxy, polyurethane, polyester) with good mechanical strength characteristics entitle them to be used as fillers that are easy to implement. Nevertheless, their negative characteristics such as irreversibility, absorption, and exchange of moisture in the boundary parts of their contact with the wood mass, invariance of volume, etc. lead to the development of two opposite tendencies that result in the creation of cracks on and in the wood mass. Epoxies with retard delayed adhesive polyadisation[18] more easily include the possibility of correction, removal of excess glue, upgrades, finishing, and mechanical processing over a long period of time, until their complete polymerization. For this purpose, Belzona®1121Solidifier adhesive containing Isophoronediamine and cycloaliphatic amine with metal dust filler was used.

Throne icons

The iconography style marks an end of a thousand-year-old ideologically aesthetic system and the beginning of a completely new period in Macedonian art history, which significantly covers the mature period, representing a higher degree of artistic development. Characterized by the stylistic and aesthetic concept of Dicho Zograf's iconography where he masters his final painting impression with the luxurious clothes of the saints, a multitude of characters, architecture, and landscapes in background[19] equally the same on the large as well as on the small formats of the throne and feastal icons. Despite the differences in artistic style, Dicho still uses a traditional icon-painting system, painting on wooden support with priming.

Icons placed between the 4th and 7th wooden pillars of the iconostasis (Fig.4-a) were subject of the first phase of conservation procedures, determined according to their condition: St. George and St. Demetrius (111,8x72x3,5cm) The Dormition of the Virgin[20] (115x85x3cm), The Ascension of Christ[21] (110,5x72,5x3,3cm) and the Virgin Hodegetria (116x79,5x3,5cm). Dealing with a number of problems inherited from the previous conservation realized in 1975/6, the current conservation faced chemical analysis and identification of material compounds, besides old conservation lacunae (Fig.4-b), methods of removing old varnish residues and con-

[18] More about the polyaddition and faster polymerization time of the Alkaline epoxy resin at room temperature, while acidic resins are slow but effective at higher temperatures, cf. К. Бочварски, *Помошни материјали-недрвни материјали*, Скопје, 2002, 221.

[19] Е. Алексиев, *Дичо Зограф*, *(1819 - 1872*), Скопје 1997; С. Цветковски, *Иконите на Дичо зограф од црквите во Дебар и Мала Река,* Струга, 2013.

[20] В. Поповска – Коробар, *Икони од музејот на Македонија,* Скопје, 2004, 224.

[21] *исто*, 304.

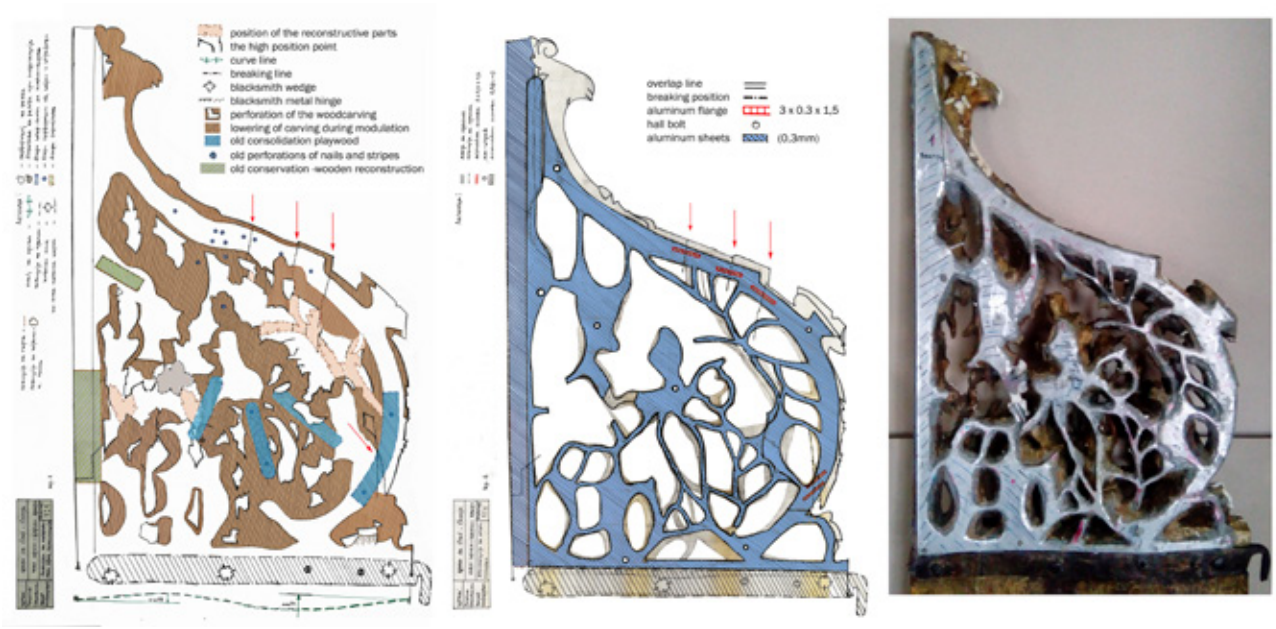

Fig.3 - Necessary documentation for performing the reconstructive conservation processes in the upper left arch of the Royal Doors: a)- the reconstructive method was made in comparison with the old photographs, also displaying the old reconstructive plywood plates; b)-the model of the aluminum support which needed to be exactly marked and cut to measure; c)- applied aluminum support on the left reconstructed wing of the Royal doors (Graphical documentation by the authors)

solidation of wooden supports, as items missing in the old archival, descriptive documents.

The results obtained from micro-qualitative analyzes and stratigraphic sections[22] showed differentiation in substrates: in all icons (40 icons from iconostasis) the chemical composition of the filler is fine crystalline gypsum CaSO4 x 2H2O and animal glue with a small amount of oil as a binder, except to the icons "The Dormition of the Virgin" and "St. Basil, St. John Chrysostom, and St. Gregory" where a substrate was subsequently applied, in which calcium carbonate CaCO3 was used as a filler in the binder. The painting palette identifies common mineral and earth pigments: cinnabar, red and brown ocher, green earth, ultramarine, berlin blue, charcoal black, and white lead. Gilding of all icons is done by traditional gilding technique or by placing gold leaves on an orange bolus. The component of the protective layer of the varnish comes to natural soft resin, and the type of resin has not been examined.

Over-painting interventions were identified almost on all icons, except on the Arch. Michail (door) and are positioned directly on the damaged older paint layer, or always on the layer of existing varnish. On other specific surfaces, a white primer was first applied, identified as lithopone ($BaSO_4$ and ZnS) to level the surface (from unevenness, minor damages, or minor loss of original paint), on which later was inflicted and painted with a new coat of paint. In this way, we distinguish paintings from the older period, and conservation retouching performed in the newer period, regarding the techniques of older iconography, and newer replicated. According to the analysis, the binder of the paint layer from the below authentic iconography contains only a protein component, which indicates the fact that the traditional tempera technique was used, while the binder on the overpainting layer contains a larger amount of oil than the protein component which indicates another used technique.

Also, a white synthetic protective varnish was applied to the painted retouched layer, and on the overpainting parts, which indicates that most of the icons were protected with the same synthetic varnish, during previous conservation interventions.

Conservation of the four throne icons

In terms of aesthetic presentation and ethical codes[23] regarding methods of conservation, the sep-

[22] NI Conservation Centre – Skopje, Conservation projects *„Конзервација и реставрација на 40 икони и иконостас од црквата Св. Спас во Скопје*", No 11-68/14, 16.09.2016.

[23] J. Gereenwood et S. Thomas, "A View from the Outside: Conservation Ethics and their Application to the Conservaton of Icons", 1, *Icon Network*>I-N Publications>Code of Ethics>Approaches to Ethical Issues, http://www.icon-network.org/import/benaki2006/ethical/

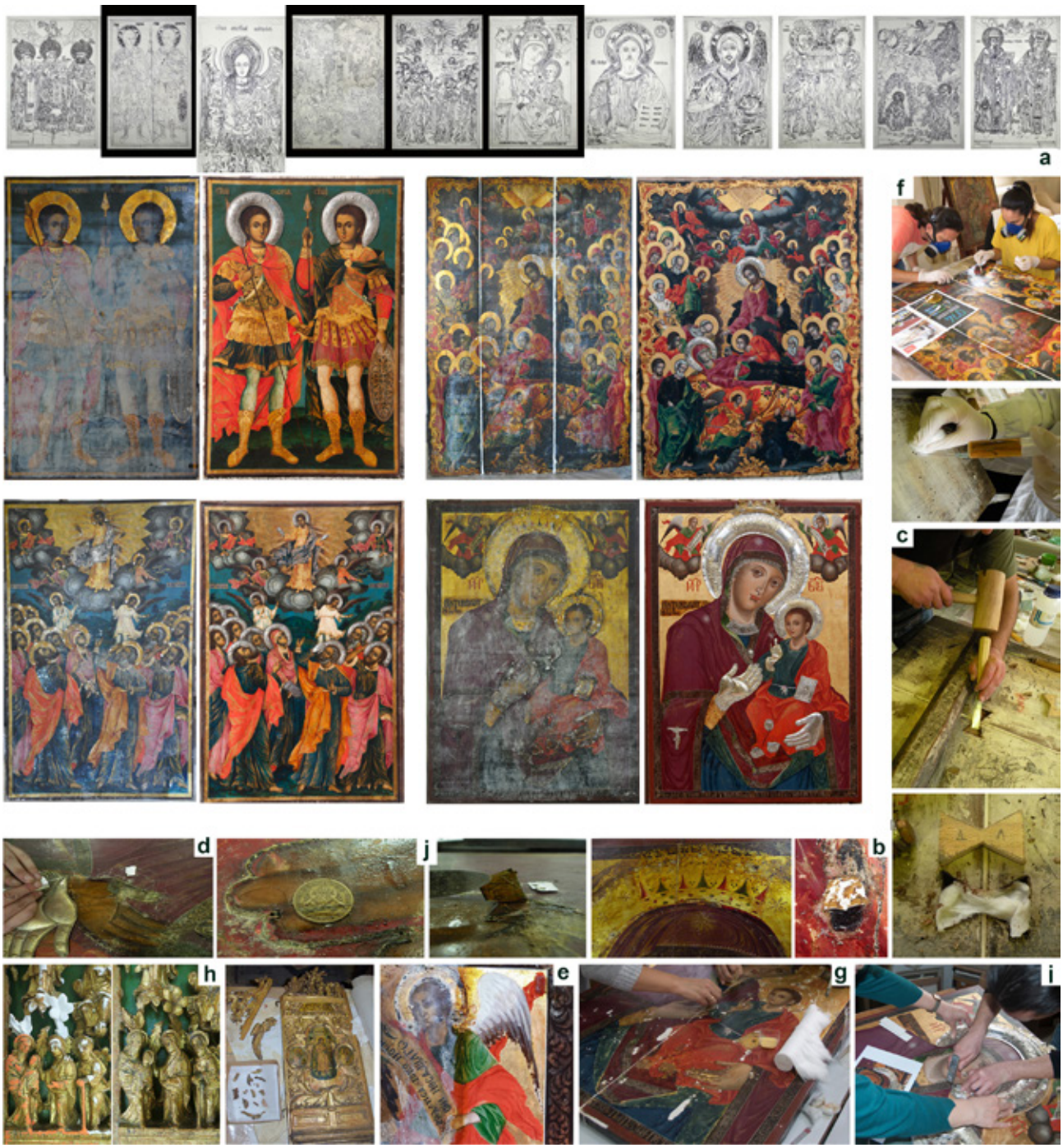

Fig.4- Conservation processes on four throne icons and northern Royal Doors(Photos by Pero Gerasimov)

aration of wooden supports has been taken as a priority in the final presentation of iconography, due to its function in liturgical purpose. The decision to fill the separation of wooden joints (wooden supports are composed of two or three vertical planks) is not followed by certain wood properties in terms of expansion and contraction, but the cavity of separate part (approx. 5 mm) at the back, filled with a mixture of wood sawdust and animal glue, while the front side is with gypsum primer, which cancels the discontinuity of iconography. Mitigating circumstances of this decision are the rear sliding bars (made of walnut or pine wood), which prevent further separation of wood compositions from composite wood, and additionally, built-in wooden joints in the shape of butterflies (Fig.4-c) placed on the back in the latest conservation treatment. Another characteristic item related to restoration is the type of retouching in the gilding area, within the decision to use gold pigment instead of gold leaf gilding, due to the differences caused by the reflection from the surface of the original gilding and the processed one. The decision to gild within the differentiation of original gilded and restorative lacunae prevailed in direction of golden pigments.

Thomas.pdf [approached: Monday 20 April 2009, by Icon Network].

The conservation of icons has begun by carefully removing wedges from the metal decoration, with precise pliers[24] (Fig.4-d) gradually, so as not to destroy the base. The surface under the metal was covered with dirt and a much darker layer of varnish, which confirmed the indication that during the cleaning/removal of the old varnish through previous conservation procedures, revetments were not removed from their positions. In the current treatment, the removal of the remaining yellow varnish (Fig.4-e) and the old synthetic one was done in stages, by compressions in a solution of organic solvents: turpentine, ethanol 96% dioxolane, acetone. Their ratio was variable depending on the thickness and condition of the varnishes. The stabilization of these chemical reactions was neutralized with turpentine and linseed oil in a ratio of 1:1. After cleaning the old varnish and dirt, two-color decoration of silver and gilding, and engraving highlighted richly ornamented robes, decorative ribbons, and richly decorated frame (Dormition of the Virgin), performed with pigmented glazes on gilded areas. Must be mentioned that some of these lacquer painting finishes were removed during the treatment of cleaning old varnish and patina in the previous conservation interventions from 1975/6 when the method with the pancol paste (mix of wax, toluene, acetone) was applied, and cleaning took place simultaneously over the entire surface of the iconography.

The back surface of the wooden supports originally was coated with a liquid primer base, and the front one was impregnated with a gypsum base and there were no indications that canvas was used as a primary layer. Fastening of the paint layer was performed by gluing protective paper and 5% solution of animal glue, so the raised places were fixed by injecting 8% solution of animal glue, using a warm environment. The treated areas were ironed with a heated spatula at 40–50°C and small bags filled with lead grains which were placed over for better fixation. The areas where the old conservation primary layer was missing or removed, were degreased with 96% ethanol and distilled water (1:1). Before the plastering process (Fig.4-f), these surfaces were impregnated with 3% solution animal glue, and the newly primer was leveled with cork (Fig.4-g), cotton swab, and egg emulsion (1 part egg yolk and 8 parts distilled water). The monochromatic and imitative retouch was performed depending on surrounding preserved parts of the original paint layer. For the gilding lacunas, a reddish color was previously applied on the substrate, and then a retouch was performed with golden pigment (Fig.4-h), to increase shine and warmth. The entire iconographic area along with the retouches was protected with insulating 10% sandarac, dissolved in 96% ethanol and fabricated damar wax varnish, to annulate the reflection of the interior lumination[25].

Metal adornment

Blacksmithing and goldsmithing, known since ancient time[26], cover more specific branches of artistic shaping in the field of metal processing, preserving the rich traditional heritage with its special mark[27]. The highest rank and development of the goldsmith and silversmith's trade achieved at the end of the 18th and the beginning of the 19th century[28] enunciate their most organized guild life in the territory of Macedonia especially appreciated during the Ottoman rule[29]. Craftsmen become important factors in society, while silversmithing enhances one of the most esteemed crafts.

During the Macedonian Revival, in the 19th century, the connection of goldsmith's guild from Skopje (*кујунџије*)[30] with the church reached its peak in decorating icons with metal adornment as an emblem highlighted by ornaments around the heads of the saints at the place of the nimbuses.The throne icons from the church of the St. Spas in Skopje are richly and symbolically ornamented, especially since each halo is made separately for each icon and differs in its decoration in order to further merge in mutual interaction with the decorative elements of the iconography or the surrounding carving of the iconostasis. Decorative revetment plaques in a term refer to decorated claddings and are rich with patterns of flora[31] and geometrical motif[32], which identify their position on revetment compositions and constitute

[24] *Тајне живописања,* Превод дела: *Секрети ремесла. Икона.* Translated from Russian Небојша Ковачевић, Београд, Плато. Приручници, 1995, 199.

[25] М. Ивановски, З. Нонкуловски, Д. Стојановски, Lighting solution for interior of the church St. Spas - Skopje and technical documentation for accompanying electrical installation, Skopje, (ZZSKGS Skopje lighting design &calculations IVANO d.o.o. 08/451/1,27.08.2000).

[26] I. Bach i B. Radojkovic, *Umetnička obrada metala naroda Jugoslavije kroz vekove,* (1956-1957), Beograd, 6-21.

[27] Н. Гечевски, *Развојот на златарско-кујунџиискиот занает во Р. Македонија*, Скопје,1999, 13-15.

[28] М. Константинов и З. Делиниколова, *Занаетчиство и занаетчиски организации*, *Етнологија на Македонија*, Скопје 1996, 65-80.

[29] Б. Радојковић, *Уметничка обрада метала,* Београд, 1953,12.

[30] Ј. М. Веселиновић, *Еснафи у Скопљу*, Нови Сад, 1895, 227

[31] M. A. Karamehmedović, *Umjetnička obrada metala*, Sarajevo, 1980,190.

[32] M. Petrović, *Profane and Sacred in Silver Plated*, Skopje, 2005, 6-22.

an ornamental vocabulary. Most florally ornamented they all reflect the Levantine Baroque[33] style. Especially distinguished is the gilded[34] parts of the Virgin's crown integrated into its design, emphasizing the enriched baroque, linked to the style of the Macedonian Revival[35] and to the acknowledgment of the holy figure's high status[36]. Highly decorated are the nimbuses on the Three Hierarchs with the ornamentation accentuated shape (*кубелија*) for the crowns and with the green glass stone attached to each bearing (*cloisonnè, каст*[37]) with little metal paws on the top. Thus, it should be noted that on the icon Arch. Michael, according to the old archival photo documentation[38] a metal sword was attached and also the small halo from the left angel on the icon Virgin Hodegetria, both missing from a couple of decades ago. Icon revetments, engaging the concept of a meta-icon by incorporating materializations of the devotional actions of its holy patron and believers, always refer to votive elements such as hands, feet, sword, collar, eyes, filigree necklace, cross, belt, parts of carriages, which also communicate with different styles, periods, and techniques of processing (Fig.6).

In terms of metalwork, characteristic of the 19th and early 20th centuries includes the basic processes of forging and decorative techniques[39]. Another technique refers to the processing of cheaper metal alloys[40], which by melting and casting create the required shape. This technique was practiced as a more economical variant, and for easier metal processing, it introduced machines that hinted at newer, modern times or the beginning of the 20th century[41]. Different techniques of assembling metal plaques to form an icon revetment suggest that the varying social and economic conditions in which these revetments were produced played a substantial role in determining their forms, used material, and decorative programs.

Metalwork techniques

Metal techniques were typically performed together as artists hammered shapes and patterns into sheets of silver from the reverse (*repoussé*) and then refined these designs from the front using finely pointed chisels (*chasing*) [42]. These nimbuses made from the silversmiths' guild are from one piece hammered from the front and back to obtain the bulging parts of the relief and the cycle carries out with light hammering followed by annealing the metal in the furnace (heating and cooling it slowly). Motifs and emblems for highly detailed and uniform designs usually were produced by using die punches[43]. After these primary process, decorative techniques from the front were performed with specific tools *(змба*). These tools push into the metal to refine the relief decoration and sharpen the edges, folds, and details in the surface, and no metal was removed in this technique (Fig.6-a).

In the old procedures[44], following the processes of casting[45] and beating[46] and material preparation[47] about the votive elements applied on the iconography, we also recognize additional parts (*epimanikia*) on metal hands produced by soldering[48] (Fig.6-b). Considering the heating process for melting, silver alloys provide the ability to wet and join base metals at low temperatures while providing good strength, moreover low temperatures used in soldering eliminate the risk of surface oxidation and reduce the distortion[49], so hardness, edge maintenance, surface shaping, welding, and mechanical bonding become important characteristics of these items. One of the

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[33] Б. Радојковић, *Старо српско златарство*, Београд, 1962, 83.

[34] About gilding process and Aqua Regia, cf. V. Dereban, *The Macedonian Jewellery*, Bitola, 2001, 19-20.

[35] А. Николовски, *Студии за доцновизантискиот и периодот на преродбата (XIX век) во уметноста на Македонија,* Скопје, 2010, 300.

[36] Leksikon ikonografije, liturgike i simbolike zapadnog kršćanstva, Zagreb, 2000, 13-82.

[37] В. В. Филатов, *Реставрация станковой темперной живописи*, Москва, 1986, 37.

[38] Old archive photo documentation from NI National Conservation Centre-Skopje about the icon of Archangel Michael (reg.no.237) and Virgin Hodegetria (reg.no.219).

[39] M. Petrović, *Jewelry in Macedonia*, Skopje, 2019, 6-12.

[40] An alloy of metals (silver, copper, zinc) participates in soldering, cf. V. Dereban, *op. cit.*, 11-13.

[41] Ј. Хаџи Васиљевић, *op.cit.*, 88.

[42] More about terms and metalwork techniques, cf. E. Yoder Moss, *Framing the Holy: Revetments on Late Byzantine Icons* (doctoral thesis), Toronto, 2016, 30-43.

[43] Theophilus (Presbyter), *On Diverse Arts: The Foremost Medieval Treatise on Painting, Glassmaking, and Metalwork*, Vol.3, New York, 1979, 110-114.

[44] З. Делимитова, „Занаети и време, Кујунџиството во Македонија" (documentary by the National television, 1981-82), *https://www.youtube.com/watch?v=HBprXPVTGE* [retrieved March 2021].

[45] Theophilus (Presbyter), *op. cit*., Vol. 3, 99.

[46] Б. Радојковић, *Старо српско златарство*, Београд, 1962, 55

[47] Lj. Vujaklija, *Umetnička obrada plemenitih metala*, Novi Sad, Muzej grada Novog Sada, katalozi, Vol. 8, 1979,13-20.

[48] V. Dereban, *op. cit*., 11-16; Theophilus (Presbyter), *op. cit*., Vol. 3, 107.

[49] Silver alloys usually comprise eutectic mixtures of tin, zinc, or copper, with lead and cadmium, cf. H. Schmidbaur et J. L. Cihonski, "Noble Metals (Chemistry)", in: *Encyclopedia of Physical Science and Technology,* Vol. 1, (Tarzana), 2001,463-492.

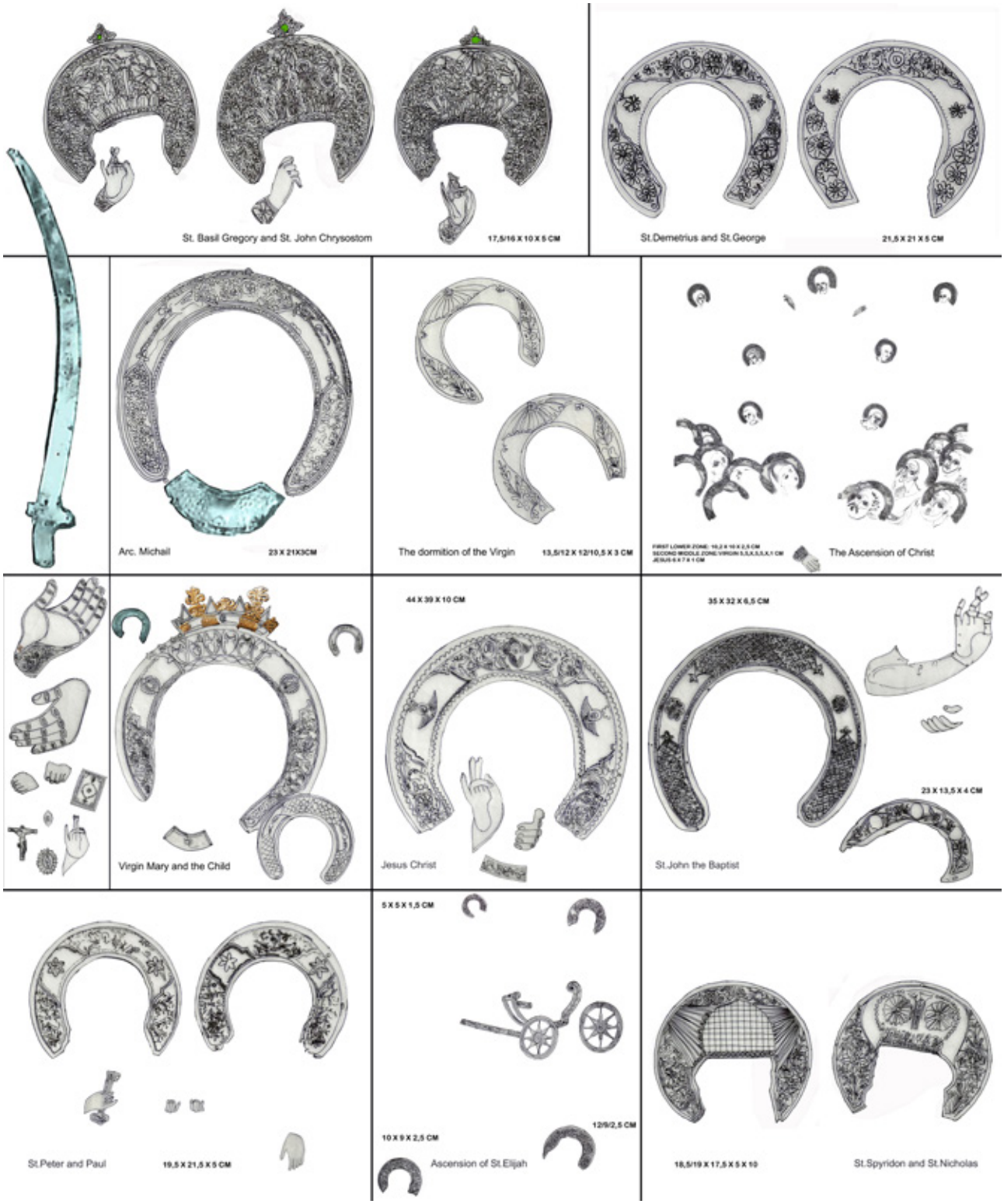

Fig.5 - Metal decoration from the gallery of throne icons with the missing parts (blue color) from Arc. Michail and Virgin Hodegetria (Graphical documentation by the authors)

techniques commonly used for casting is by using molds (*пандевџиња*)[50], besides wax casting as a convenient technique for serial production of negatives.

Conservation

The rapid loss of value from the past or a reflection of an old craft trampled today in the race for the modern age includes silver revetments as products of applied art which was not given much importance during conservation work. Metal ornaments, halos, in comparison with iconography, during the process of icon conservation treatment, have always been

[50] M. Petrović, *op. cit*., 6-12; V. Dereban, *op. cit.,* 12.

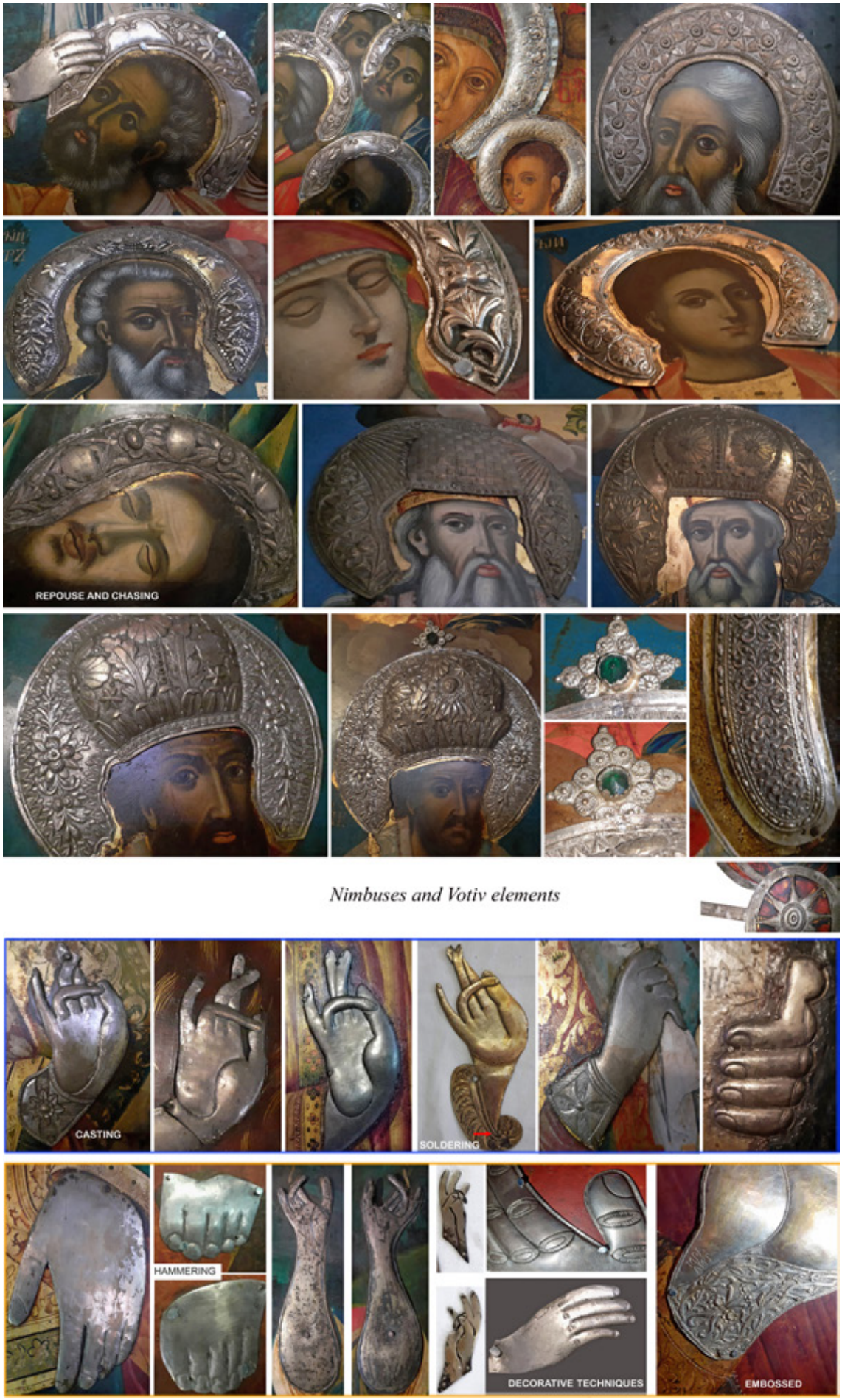

Fig.6- Metalwork on nimbuses and votive elements(hands, feet) (Photos by the author)

Fig. 7 -Conservation: a)-halos before and after conservation process of cleaning; b)-gilded Virgin's crown; c)- metal Bible cover before cleansing(Photos by Pero Gerasimov)

treated as a secondary contribution. Until recently, historican of art have ignored icon metal nimbuses, dismissing them as unimportant frames and hindrances to the icon itself. Moreover, the tendency to emphasize the artistic value of the iconpainting in the aesthetic representation did not recognize metal decoration, that many silver halos were removed or never returned to iconography. That allowed a certain ignorance and disrespect of metal ornaments, especially those applied in recent periods, that reduced the conservation treatment of silver halos to a household endeavor, such as cleaning tarnish silverware, using the reaction of baking soda and lemon, and wiping off the residue of evident oxidation with a soft cloth, or simply by using chemical-mechanical cleaning treatments[51].

During the conservation made in 1975/76, according to the photo documentation, metal halos were cleaned to a high gloss without removing from their bearings, for which the recent conservation from 2016-19 evidently exposed remains of old varnish beneath and above metal halos, were overflowed with negligence during the former conservation process of removing the old varnish from the iconography. The nimbuses were found to be apparently darkened by accumulated dirt. If silver, like noble metal, react with sulfur and sulfur compounds produces silver sulfide (Ag_2S) and turns dark gray to black (Fig.7-a) or tarnish[52]. Fortunately, it is easily removed by mechanical cleaning or with a mild acid solution, but if there is an alloy with silver and copper, which is a common cause, silver chloride appears which destroys the metalcore. Mainly the air in modern cities contains sulfur, which becomes a serious threat for the metal decorations in the church, mostly because nowadays the urbanization[53] in the old bazaar is becoming even more frequent.

In some western analyses about the abrasive cleaning (using acidified thiourea)[54] in the removal of the corrosion of the silver[55], tarnish from the surface, usually produces side effects, namely over cleaning, etching, forming unknown surface complexes, and increasing the rate of further tarnishing. Instead, mildly abrasive materials such as calcium carbonate, gamma-alumina and chromium oxide suspenden in

[51] T. Palomar et B. Ramirez Barat et E. Cano, "Evaluation Of Cleaning Treatments For Tarnished Silver: The Conservator´s Perspective", in: *International Journal of Conservation science* Vol. 9, Issue 1 (Iasi), 2018, 83.

[52] Shao-Wei Fu, *A reaction study of sulfur vapors with pure silver and silver-indium solid solutions as a new anti-tarnishing test method* (M A thesis), Irvine, 2016, 2-24.

[53] N. Donevska, "Trade-offs in sustainable urban development: the case of Skopje", *Journal of Environmental Studies and Sciences*, Vol 7(1), 2017, 152-159.

[54] J. Contreras et, J. L. Ruvalcaba et F. Rodriges-Gomes, "Effects of the cleaning of silver with acidified thiourea solutions", in: *Interim Meeting of the ICOM-CC Metal Working Group Conference* (Edinburgh, September 16 – 20, 2013), *Conference Proceedings of Metal 2013, Historic Scotland and International Council of Museums*, Edinburgh, 2013, 227-231.

[55] H. J. Plenderleith, *The Conservation of the Antiquities and Works of Art, Treatment, Repair and Restoration*, London, 1971, 219-223.

Fig.8- Style differences between the door of the deacon and the proscomidy on the north and south sides of the iconostasis (Photos by the author)

deionized water containing a nonionic surfactant removed tarnish successfully[56], moreover, the ideal treatment should remove the tarnished layer without affecting the underlying silver surface.

Another important fact is paying attention to the deliberately placed black pigment[57] at the bottom of the ornament' relief, with achieves a contrast of shiny light-dark (*Chiaroscuro*) and sustain the embossed ornaments to stand out more. This "blackness" was usually being removed alongside the tarnish, accumulated dust, and dirt or greasy stains, during the cleaning treatment process, without taking into account the final aesthetic image presentation. Therefore, in the purification of silver halos, the procedure of conserving this artistic element together with the noble patina[58] was not considered[59], in this case, on the bottom of the embossed ornaments, which would dramatically affect the final impression (Fig.7-a).

Metal halos on the 4 throne icons after the cleaning treatment were not protected-varnished with a protective layer[60] which further, after almost a year,

[56] Wh. Glenn et S. Lansing Maish et W. S. Ginell, "A Comparative Study of Silver Cleaning Abrasives.", in: *Journal of the American Institute for Conservation*, vol. 29, no. 1, American Institute for Conservation of Historic and Artistic Works, Washington DC., 1990, 13–31.

[57] V. Dereban, *op. cit*., 16 (the difference between niello and savah: Savah is a mixture of organic materials), cf. S. la Niece, "Niello: an Historical and Technical Survey", in: *The Antiquaries Journal*, Vol. 63, Issue 2, (Cambridge) 1983, 279-297

[58] М. Јовановић, *Музеологија и заштита споменика културе*, Београд, 1994,108.

[59] A. O'Connor et al., "Silver or Gold? Surprising challenges in cleaning a 19th-century Persian water pipe", in: *American Institute for Conservation of Historic and Artistic Works,* Vol. 22, Eds. E. Hamilton et K. Dodson, (Washington), 2015, 151-168.

[60] Ch. et al., "Evaluation of three protective coatings for indoor silver objects", in: *American Institute for*

affected certain lesions for the occurrence of oxidation, taking into account the measurements of humidity[61] (above 65%[62]). However, the consideration of further cleaning methods including the protection will proceed in the next conservation treatments[63]. After the conservation procedures on the icons, purified halos were placed on their authentic positions, framed by a rim on which they were nailed, once presumably with silver nails, today filled with non-corrosive ones[64] (Fig.4-i).

Discussion

The carvings from Nestor Aleksiev Mirčevski

It is interesting to note the orally transmitted data from the old witnesses about some details related to iconostasis. Namely, in 1908, with the outbreak of fire in the bazaar, near the church of St. Spas, during the evacuation of the iconostasis, some parts disappeared, for which it is assumed that new ones were later made by Nestor Mirčevski[65], a carver from the Mijak area[66]. It is also mentioned that during the Second World War the iconostasis was dismantled and transported to the National Bank in Skopje (1943-1944) for protection against the possible risk of bombing[67], then, by order of this famous carver iconostasis was returned to the church, after the war. The well-known carver also participated in the completion of the carving in the church interior, performing the carving of the crown from the bishop's throne, leaving a signature engraved inscription[68]. Through visual analyses about the technique and the style of the carving' performances we conclude that this carver was involved in the carving of the south Royal Doors, implementing his characteristic protomes (heraldic lions) into the carving pilasters on the southern Royal Door (Fig.8), which evidentially correspond with the protomes on the proskynetarion in the church interior. Another difference is the gilded and silvered carving, also painted on the iconographic zones, while the south Royal Door are processed only in carving, which speaks volume about the craftmanship done in more recent times. Moreover, the upper medallion ends with a cross and on the side with the figures of Emperor Constantine and Empress Jelena, which coincidences the similarity with the Royal Doors from the former Cathedral of the Holy Mother of God in Skopje[69].

Cult to the Holly Mother

The great piety towards Holly Mother as a religious cult, moreover as the protector of the city of Skopje[70] exist since long time ago, in the legend told about the church from Byzantine period of the 11th-12th centuries dedicated to the miraculous Holly Mother (Tricherousa) with three hands[71] mentioning the church under the fortress of Kale[72]. The cult endures during the post-Byzantine period of the 16th-17th centuries when the church St. Spas was renovated and extended, as evidenced by a fresco found on the outer south wall[73]. In the period of the 19th century, this cult endorses the richly decorated painted frame of the throne icon "The Dormition of the Virgin" and with the especially gilded metal crown on

Conservation of Historic &Artistic Works, Vol. Six, (Washington), 1999, 41-69.

[61] Д. Ванчевска и Б. Бозароска Павлоска, *Конзервација на метални археолошки предмети*, Скопје 2013, 369-380.

[62] A. Popovska, *op. cit*., 345-356.

[63] Д. Ванчевска и Б. Бозароска Павлоска, *нав. дело*, 69-71, 133-142

[64] *Тајна живописања*, 155-156; G. Turner-Walker, *A practical Guide to the Care and Conservation of Metals,* Taipei, 2008, 37-50; R. L. Barclay et C. Dignard et L. Selwyn, "Caring for Metal Objects", in: *CCI's Preventive conservation guidelines for collections online resource,* https://www.canada.ca/en/conservation-institute/services/preventive-conservation/guidelines-collections/metal-objects.html#a1c7 [retrieved April 2021].

[65] М. Ф. Јовановиќ, *Православната соборна црква света Богородица во Скопље*, Скопље, 1935, 191.

[66] Д. Ќорнаков, *op.cit.*, 228-232.

[67] Б.Несторовски и Р.Несторовска, *Нестор Алексиев Мирчевски, резбар*, 2002, 112-113.

[68] *ibid,* 112-113. *ibid,* 112. (In 1925 and 1934 he stayed in Skopje and worked for the church St. Spas in Skopje) / About the apearanse of the south Royal Door and the bishop's throne, cf. Ј. Хаџи Васиљевић, *op.cit.*, 140-142, Figs. 62, 63.

[69] М.Ф.Јовановић, *Православна саборна црква Свете Богородице у Скопљу*, Споменица српско-православног саборног храма Свете Богородице у Скопљу, Скопље, 1935, 349.

[70] С. Јовчев, *Соборен храм Рождество на Пресвета Богородица во Скопје*, Скопје, 1997, 7-13.

[71] Talking about the Byzantine envoy and diplomat Theodore Metohit, who came to Skopje in 1299, cf. E. Malamut, "Sur la route de Théodore Métochite en Serbie en 1299", in: *Actes des congrès de la Société des historiens médiévistes de l'enseignement supérieur public* Année, 26e congrès, Aubazine,1996, Paris 1996, 165-175; А. Радовановић, "Хиландарска икона Богородице Тројеручице", *Хиландарски зборник* 14, Београд 2017, 173-187.

[72] Д. Коцевски, „Мистеријата на катедралната црква Св.Богородица Троерачица во Скопје", *Нова Македонија*, 10.11.2018.

[73] When the fresco of Virgin with Child was discovered on the south facade of the church, cf. К. Димитровски, *„Конзерваторско-архитектонски проект за црквата Св.Спас-Скопје: Санација на покривот и фасадата на црквата Св. Спас, Скопје",* realized with the donation from the Government of the United States of America.

the icon "Virgin Hodegetria" still signifying this special contribution in St.Spas even in the late 19th century. During the conservation of the 4 throne icons, only into the votive hands of the Holly Mother were found metal coins (Fig.4-j) from different time periods, mostly with the years after the Second World War, again, indicating and glorifying the cult of the Mother of God in continuity, endorsing her with additional votive elements applied until recently[74].

Conclusion

Through conservation research, we have tried to classify the ways of creating the material cultural heritage that is spreading to this day, discovering its artistic beauty. Countless intertwining, long rows of patterns, ornaments, a two-color play of silver and gold simply captivate, sealing the past, the time of awakening, the time of Macedonia's renaissance, when crafts felt inspired, turning their skills into an artistic impulse, nowadays left as our national Macedonian cultural heritage.

Encouraging further investigation especially the lack of chemical analysis about the compound and differences in metal halos necessary for further treatments, and also identification of pigmented varnishes, that will illuminate and scientifically interpret old technology and crafts, this study encourages even more stylistic analysis, considering the carved iconostasis and the share of the newer carver as the author of some elements in the church interior. Additional research for the old manufacturing technique, alongside the wooden iconostasis maintenance, the type of painting retouches, methods of conservation of metal decoration will become essential for the final presentation of this cultural heritage.

In a direction of slowing the decay and thus reduce the need for conservation-restoration procedures in the future, it is necessary to establish a maintenance regime and constant monitoring by experts. The importance of recognizing old techniques and materials that are progressively changing today also plays an important role in deciding on the method used in the treatment of conservation, especially as changes in old processes and tools in art production are increasingly retreating from the authentic work.

[74] Act for Protection: *Закон за прогласување на црквата Св. Спас за културно-историски споменик*, Службен весник – НРМ, Бр. 24, 1946; *Одлука на ЦЗЗСК*, Бр. 1041, 27. 07. 1950; *Регистрација на ГЗЗСК*, Бр. 27/44, 19. 02. 1968.

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7. Dereban, Vangel. *The Macedonian Jewellery*, Mikena, Bitola, 2001.

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ДРВЕНАТА РЕЗБА, ИКОНОПИСАНИТЕ ТВОРБИ И МЕТАЛНИТЕ УКРАСИ ВО ЦРКВАТА СВ.СПАС ВО СКОПЈЕ КАКО ОБЕДИНЕТА КОНЗЕРВАТОРСКА ЗАЛОЖБА

Резиме

Ова истражување придонесува за подобро познавање на техниките кои ја истакнуваат свечената нота на иконостасот во однос на процесот на резбарење, технологијата на иконописување, обработката на метал за опковите на иконите и вотивните додатоци, кои здружени го засилуваат уникатниот впечаток на арабескна целина, што го дели олтарниот простор од верниците. Истражувањето е дел од конзерваторската студија посветена на применетата уметност на иконостасот во црквата Свети Спас во Скопје, познат како споменик на културата од големо значење за современата македонска култура. Уметничкиот преродбенички стил, карактеристичен по флората и фауната, како и со геометриски шари и човечки фигури, изобилува со виталноста на традиционалното домашно наследство, ширејќи ја во текот на 19-от век националната возбуда која започнала да се слави со особено внимание. Обединувајќи три занаетчиски еснафи, проширувајќи го својот уметнички талент на целата обработка на иконостасот за време на обновата на црквата Свети Спас во Скопје во XIX век, кога најдобрите мајстори, мијачките копаничари, Дичо Зограф иконописец и познатиот скопски кујунџиски еснаф, биле ангажирани како изведувачи и донатори, со својата работа на овој иконостас ја направиле препознатливо дело за македонската ренесанса.

По подолг временски период новонастанатите оштетувања почнаа да се третираат со конзерваторскиот проект во текот на 2016/2020 година, заштитувајќи го резбареният иконостас, 4-те престолни икони и нивната метална декорација. Исто така, поради погрешна манипулација, настаната за време на литургиската поворка, дошло до оштетување на левиот лак од Царските двери и реконструкција на резбаните отпаднати фрагменти. По чистењето на резбата од нечистотија и насобраните маснотии, целиот иконостас беше изолиран со најлони за да се создаде комора погодна за дезинсекција. За таа цел, иконите поставени меѓу 4. и 7. дрвени столбови на иконостасот беа предмет на првата фаза на конзерваторските постапки, утврдени според нивната состојба. Конзервирањето на иконите започна со внимателно отстранување на металната декорација, и пристап до целата лаковна површина, а чистењето на старите лакови се вршеше етапно, со компресија во раствор од органски растворувачи: терпентин, етанол 96% диоксолан и ацетон, во сооднос и зависност од дебелината на слојот и состојбата на лаковите и вниманието кон пигментираните лакови врз позлатената позадина. Конзерваторските истражувања за престолните и празничните икони, констатираа бројни лакуни од пресликувања, како и стари конзерваторски ретуши, кои беа предмет на нивно отстранување, во делот на естетската презентација, а во таа насока, оддвојувањата на дрвените табли од дрвените носачи беа анулирани со нивно прицврстување и пополнување, за обновување на континуитет на иконописната содржина, од предната страна.

Декоративните метални облоги на насликаните икони обилуваат со примероци на флора и геометриски мотиви кои ја идентификуваат нивната положба на нимбусите, што хармонично го надополнува декоративниот речник на иконостасот. Металните орнаменти најчесто се правеле со ковање на сребрените листови подметнати врз полузаоблени калапи или основи, а потоа добиените форми од лицето се оплеменувале со фино зашилени длета додека не се постигнела целосна-

та уметничка согласност со декоративниот осликан мотив на иконата или гравурата на позлатата. Конзервацијата на опковите едноставно само ги пречисти металните ореоли како засебна изработка, отстранувајќи ја при тоа и патината, додаток којшто го нагласува визуелниот впечаток.

Поттикнувајќи ги понатамошните истражувања, пред сè темелните хемиски анализи неопходни за продолжување на третманот, кои ќе ги осветлат и научно толкуваат старите техники и занаети, оваа студија ги поттикнува и стилските дилеми со кои се соочуваат сите оние кои ја обновиле и дополниле внатрешноста на оваа црква, која беше силно означена по овој величенствен иконостас и во уметничка и програмска смисла. За да се забави влошувањето и да се намали потребата од процедури за конзервација и реставрација во иднина, неопходно е да се воспостави режим на одржување и постојан мониторинг од стручни лица.

Важноста околу сигурниот извор за препознавање на старите техники и материјали кои постепено се менуваат во занаетчиските и рачните уметнички обработки денес, исто така, игра важна улога во одлучувањето на методот во текот на конзерваторскиот третман и реставрацијата на старите ракотворби, особено што старите процеси и алатки во уметничката продукција сè повеќе се променуваат и повлекуваат од автентичното дело.